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# Implementing IHI Joy in Work Framework to Decrease Turnover Among Unit Leaders

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## Section I: Abstract

**Problem:** A medical center in an integrated health care system in Northern California has experienced high turnover for unit level leaders employed in an acute care setting. The role of unit level leaders (managers, assistant managers, and supervisors) in this organization is complex, often stressful, and includes 24/7 accountability. Leaders must simultaneously deliver on organizational goals, patient safety, quality, budgets, and staff satisfaction (Loveridge, 2017). Increasing resilience can help these leaders cope with stress and find joy in their work, making them less likely to leave their leadership positions (Hudgins, 2016).

**Context:** According to Loveridge, the turnover rates of nurse managers in the U.S. in 2010 was 8.3%, higher than that of senior leaders, chief nurse executives, and vice presidents (2017). The cost to replace a nurse manager can be as much as 75%-125% of their salary (Loveridge, 2017). Sources of fatigue for nurse managers that are related to high turnover have been identified as 24-hour accountability to an organization, visibility and responsiveness to staff, and interruptions in day-to-day operations. (Steege, Pinekenstein, Arsenault Knudsen, Rainbow, 2017).

**Intervention:** The intervention for this Doctor of Nursing Practice (DNP) project included the introduction and implementation of the Institute for Healthcare Improvement (IHI) framework for improving joy in work. This consisted of a 12-week education program offered by the IHI, called "Finding and Creating Joy in Work" which included biweekly video lectures and was facilitated in a peer group practice setting for unit level leaders. The focus of the program was to use the framework to help discover and improve the conditions that contribute to joy in the workplace.

**Measures:** The efficacy of the intervention was measured using two tools, the *Conner-Davidson Resilience Scale* and the *Anticipated Turnover Scale*. Both were given to participants prior to the

intervention, and then again following program end date. The goal was to see whether there was an increase in resilience scores and a decrease in the anticipated turnover scores for unit level leaders. During the 3-month intervention, participants were also encouraged to identify and implement quality or staff engagement/improvements projects.

**Results:** There was an 18% decrease in the mean anticipated turnover scores following the program. This suggests that providing tools to help unit level leaders measure and track joy in their departments, could help reduce turnover. There was no measurable difference between mean pre and post-intervention resilience scores for unit level leaders who completed the IHI program.

**Conclusions:** Education in performance improvement methodologies using the IHI framework for improving joy in work, may keep unit level leaders in their roles longer. A longer term project needs to be conducted to determine if the IHI framework can increase resilience among unit level leaders. Also, a project that includes staff at all levels within an organization would be important in testing this framework.

**Keywords:** resilience, nurse leaders, intent to leave, and stress

## Section II: Introduction

### Problem Description

The role of unit level nurse leaders in an acute care organization is complex and often stressful. These leaders must simultaneously deliver on organizational goals, patient safety, quality, budgets, and staff satisfaction (Loveridge, 2017). According to Loveridge (2017), the turnover rate of nurse managers in 2010 in the U.S. was 8.3%, higher than that of senior leaders, chief nurse executives, and vice presidents. The cost to replace a nurse manager can be as much as 75%-125% of their salary (Loveridge, 2017).

According to Cline (2015), nurse leaders are expected to do more with less, all the while maintaining unit quality standards and an engaged staff. These nurse leaders need to have resilience to maintain their role. Health care reform has challenged all health care organizations to improve quality of care and reduce costs. This new pressure on health care organizations is another reason resilience should be considered a core competency for leaders. Resilience can impact team dynamics and employee engagement if the leader is able to demonstrate mental resilience in the face of adversity. Finally, resilience can help provide career longevity by providing a buffer against the stressors of the role. According to Cline, a predictor of future success of a leader is their response to adversity and failure.

Hatler and Sturgeon (2013) described how uncertainty about the effects of the many changes in health care (e.g., reduced government reimbursement, shorter hospital stays, increased use of technology, and changes to the work force) have led to an increasing sense of uncertainty for leaders. Nursing already focuses on suffering and tragedy and the cumulative effects of those experiences can diminish one's responses over time. Developing resilience can alter the way an individual think and responds to stress. Increasing resilience (Hudgins, 2016)

can help leaders cope with stress and find joy in their work making them less likely to leave their leadership positions.

Kim and Windsor (2015), using grounded theory, investigated the differences in coping methods and strategies among first-line nurse managers. They found, through interviews with 20 first-line nurse managers employed by six university hospitals, that they utilized a dynamic and reflective process to develop resilience. This was described as shifting thinking from negative to positive, flexibility from rigid to open, separating work and family life, and from using task-oriented to human-oriented approaches. In this way, nurse managers could be more effective in addressing and motivating the staff around them. Resilience is a social process of accessing resources and acting to overcome adversity. Resilience was enhanced by a sense of achievement, family support, and financial independence. Nurse managers with more experience demonstrated greater resilience. This finding supported the premise that resilience can be nurtured and developed throughout a career.

In 2018, Don Berwick provided a framework, called the triple aim to increase the value of healthcare in the United States. There were 3 overarching goals of the triple aim: improve the individual experience with care, improve the health of populations, and reduce the per capital costs of health care (Sikka, Morath, & Leape, 2015). Berwick has more recently recommended an additional aim, that would support the healthcare workforce finding joy and meaning in their work. This fourth aim helps improve the experience of providing care by calling for leaders to create environments that support employees to perform at their highest potential.

**Resilience**. Resilience has been defined as a multidimensional, dynamic, and variable process between an individual and their environment (Helmreich et al., 2017). There may be a trajectory of undisturbed mental health proceeded by adversity that impacts that health, followed

by a successful recovery (Helmreich et al., 2017). How some individual's rebound after adversity may be influenced by personal and environmental resources and therefore resilience can be improved through interventions.

Resilience has been described as a trait, an outcome, and more recently as a process (Helmreich et al., 2017). The trait theory of resilience identifies positive personality characteristics that enhance an individual's response to stress (Helmreich et al., 2017). The trait theory of resilience was replaced by the outcome theory of resilience that describes an individual's response to stress as psychological and based on several resilience factors.

Helmreich et al. (2017) conducted a Cochrane systematic review to examine the effects of resilience-enhancing interventions on clinical and non-clinical populations. The criteria for inclusion in the review included randomized control trials and cluster-randomized trials from 1990 to present. The critical appraisal of the evidence was performed using the GRADE working group. The findings of the systematic review by Helmreich et al. suggested that training in five factors can modify resilience development in individuals. The first is active coping, introducing an active coping strategy to be used on a stressful situation. Second is self-efficacy, supporting an individual to identify their personal strengths, and successes. Third is positive attributional style, encouraging individuals to focus on the positive things in their lives to gain a brighter outlook for the future. Fourthly is social support, encouraging individuals to reflect or enhance their current social network. Finally, the fifth factor is cognitive flexibility that requires cognitive challenging of negative thoughts by replacing them with positive thoughts. Religiosity was also a factor and while spirituality can improve resilience, other techniques such as yoga and meditation, were equally supported.

**Available Knowledge**

**PICOT question.** In unit level leaders, how does education and training using the IHI Framework for Improving Joy in Work, improve resilience, and decrease anticipated turnover over during a 6-month period?

**Search strategy.** A search was performed in October 2017 and updated in August 2018 using the search terms, "resilience" "nurse leaders" "intent to leave" and "stress". Databases searched included CINAHL, Scopus, EBSCOhost, Cochrane Database of Systematic Reviews, and PubMed. The *IHI Framework for Improving Joy in Work: IHI White Paper* (Balik, et al., *2017)* and other related educational resources were downloaded directly from the IHI website.

Articles included are systematic literature reviews and qualitative and quantitative studies published during the past 3 years. The articles chosen were evaluated for strength of evidence using the John's Hopkins *Research Evidence Appraisal Tool* (Dearholt & Dang, 2012).

**Resilience, job satisfaction, and turnover.** The impending nursing shortage, partly due to the high number of aging baby boomer nurses facing retirement, has been well documented and is expected to peak in 2020 at over 1,200,000 (American Association of Colleges of Nurses, 2011). Included in this number are nurse leaders, who will leave their positions, their company, or the practice (Hudgins, 2016). Having highly qualified leaders is an integral part of ensuring safe care delivery, and retention of staff (Hudgins, 2016).

Hudgins (2016) defined resilience as the ability to transform disaster into a growth experience and more forward. Job satisfaction is influenced by work climate, work relationships, schedule, and professional recognition, and autonomy. Satisfaction may be influenced or enhanced by resilience. Anticipated turnover is when individuals plan to leave their current role, during a specified point in time. It can be affected by quality of work relationships,

administrative systems, complexity of work, degree of empowerment, existence of positive relationships, and trust in their superior.

Hudgins (2016) used these definitions when they conducted a quantitative study that was to identify the relationships between resilience, job satisfaction, and anticipated turnover in nurse leaders. A goal of the study was to try to understand how individual nurse leaders perceive resilience and job satisfaction, as well as why they leave their current role.

Hudgins (2016) synthesized the theoretical framework developed by Polk's (1997) mid-range theory for patterns of resilience and Beeson's (2012) traits of resilient people to guide the study. Resilience was measured using the *Connor-Davidson Resilience Scale* (CDRS). The *Anticipated Turnover Scale* (ATS) was used to measure intent to leave and a single question was used to ask if leaders were satisfied in their current role. Their sample consisted of 89 nurse leaders in a multi-hospital health care system. Analysis of data demonstrated a statistical significance between resilience and job satisfaction. There was also a direct relationship between low job satisfaction and anticipated turnover. Hudgins demonstrated that resilience does play a vital role in enhancing job satisfaction and mitigating the turnover rates of nurse leaders.

According to Hudgins (2016), resilience is a key skill in successful leadership that should be fostered, mentored, and taught to all nurses. Steps to develop resilience in nurse leaders include self-assessment of general disposition, practicing healthy coping strategies and a positive world view, developing a professional or personal network of mentors, and redefining their passion, exploring personal faith, and seeking to serve others.

**Nurse leader role stress and coping**. Udod, Cummings, Care, and Jenkins (2017) used the Lazarus and Folkman's stress and coping theory as a framework and a qualitative exploratory inquiry and analysis design to investigate role stressors, coping strategies, and self-health of

nurse managers in Canada. Udod et al. found there were three main themes of nurse manager stressors. The first was working with limited resources, whether that be budget or staff. The second was responding to continuous changes within the organization, which included implementation of a lean performance improvement system that required constant reformatting of workflows. Finally, was the disconnect of senior management from the practice area.

Udod et. al. (2017) identified the following coping strategies: peer and superior support, planful problem solving, and reframing situations to reflect, re-orient. and reconcile events to help alleviate anxiety and fears. Health outcomes reported by participants included family and personal strain, feelings of distress, emotional exhaustion, lack of regular exercise, weight gain or loss, and sleepless nights.

Udod et al. (2017) concluded that while coping strategies had been developed, they did not completely reduce work stressors. Nurse managers are exposed to high stress levels as they try to contain costs and to drive performance in the Canadian health care system. The researchers concluded that a long-term strategy is needed to address the underlying organizational factors that impact the stress on nurse managers, which impacts their job satisfaction and shortens the tenure of their role.

Udod et al. (2017) recommended that leadership development of nurse managers be done to help decrease stress and improve self-efficacy. Other recommendations included: creation of a social support system and work climate that helps to develop feelings of belonging, and redesigning the nurse leader role to allow for more energy in coaching, mentoring, and strengthening relationships with staff which will ultimately net improved health care outcomes.

**Supporting nurse leaders**. Loveridge (2017) performed a descriptive qualitative study of nurse managers in hospital settings, many of whom had considered leaving their role at some

point. Four themes emerged from the study. The first theme was "sink or swim"; feeling like they had been thrown into the role with little preparation or support (Loveridge, 2017). The second theme was the sense that there is "no end" to the job, including task saturation and span of control (Loveridge, 2017). Nurse managers could be called at any hour of the day and night and often had to take work home to complete it (Loveridge, 2017). The third theme, "support me", referred to nurse managers needing to feel supported by their boss with clear expectations but also trusted to do the job (Loveridge, 2017). The fourth and final theme, "finding balance", refers to finding a way to eat properly, exercise, and unplug from the job (Loveridge, 2017).

The sources of stress for nurse managers can be found in the lack of support for their role and lack of involvement in key decisions that they need to act on is another (Loveridge, 2017). They can feel caught in the middle between staff and upper leadership. The volume of their work can be overwhelming, as well as the constant reprioritizations that must occur during the day to keep things going. "The pressure to maintain patient satisfaction scores, employee engagement, and staff safety while ensuring operational efficiency may come to seem like an insurmountable task" (Loveridge, 2017, p. 23).

Loveridge (2017) recommends leader support for managers as a key factor in alleviating nurse manager turnover. She also recommended creating support groups for new managers to help them deal with stress which may increase their job satisfaction and tenure within the organization. Allowing for flexible work schedules, sharing of on call responsibilities, and evaluating the span of control of the manager's workload all should be considered to help improve job satisfaction of nurse managers.

**Nurse leader fatigue**. Steege et. al (2017) studied nurse leader experiences with fatigue using a qualitative descriptive design with semi-structured interviews, as well as measurement of

fatigue using the *Occupational Fatigue Exhaustion Recovery Scale* (OFERS). Ten nurse managers and 11 nurse executives were recruited to participate in the study. The interviews were conducted either in person or by phone and included questions that explored fatigue levels, types and sources of fatigue, coping strategies, and consequences of nurse leader fatigue.

Steege et al. (2017) used the model of occupational fatigue in nursing as their conceptual framework (Steege & Pinekenstein, 2016). This model conceptualizes nursing fatigue as mental, physical, and emotional. The model suggests fatigue occurs on a continuum ranging from acute to chronic based on the demands of the work system exceeding the available capacity of the nurse. Individual coping strategies can help to mitigate the development of fatigue and its impacts. Nurse leaders are required to create environments that help to decrease the risk of staff fatigue but little is known of their own experiences with fatigue.

All nurse leaders (nurse managers and nurse executives) who participated in this study reported they experience fatigue at work (Steege et. al., 2017). Nurse managers reported fatigue sources from 24-hour, 7 day a week accountability to departments, the need to be visible and responsive to staff, and daily interruptions to workflow. Nurse executives reported long days with frequent meetings leading to mental fatigue and stress, due to an elevated level of responsibility in the organization. Nurses at both levels of leadership tried to develop coping strategies that included creating work boundaries, wellness and restoration, social supports, and finding positive challenges. The scores on OFERS demonstrated that nurse managers and executives had similar levels of acute fatigue, but that nurse managers had higher chronic fatigue and lower inter shift recovery levels.

Without sufficient recovery and support, acute fatigue can develop into a more chronic state that can impact nurse performance, well-being, and retention (Steege et. al., 2017). Impact

of fatigue on nurse leaders was categorized by themes including: impact on life outside of work, concerns about sustainability of self in role as well as the future pipeline for leaders, and the downstream effects on the quality of care. The authors concluded by calling for organizational support to evaluate leadership structures and workload such as limiting the amount of time at work. Resiliency practices should be developed and role modeled for nurse managers to learn how to promote self-care.

**Nurse manager satisfaction and intent to leave**. Warshawsky and Havens (2014) studied 291 nurse managers from acute care hospitals in the United States to understand their levels of job satisfaction and intent to leave. They developed five questions and distributed them to the nurse leaders via email. This included satisfaction with being a nurse manager, likelihood to recommend nursing management as a career, satisfaction with time spent with staff, how long they planned to stay in current position, and if they were planning to leave within the next 5 years, and if so, primary reasons why?

Seventy percent (n=203) of the respondents reported they were either satisfied or very satisfied with their roles as nurse managers (Warshawsky & Havens, 2014). Most would recommend nurse management as a career (68%, n=198), but when asked about time spent with the staff, 48% (n=139) were either dissatisfied, or neutral. A quarter of participants (n=73) responded that they planned to leave their current positions within 2 years and another 37% (n=108), within the next 3-5 years. The primary reasons for leaving a position were burnout or stress, career change, retirement, or promotion.

Further analysis of the data demonstrated that nurse leaders who planned to stay for more than 5 years had more satisfaction with the amount of time they spend with their staff and were more satisfied with their jobs. Nurse managers who planned to stay in their jobs were also more

likely to recommend nursing management as a career. Comparisons of leaders who planned to stay versus those who planned to leave within 5 years, did not differ in age, highest degree, years or nursing experience, nurse management experience, unit tenure, membership in AONE or NCONL, or hospital size (Warshawsky & Havens, 2014).

Warshawsky and Havens (2014) recommended that turnover, satisfaction, and intent to leave among nurse leaders in each organization be evaluated. Vacancy rates and turnover rates point to a larger issue within the role. The second recommendation was to evaluate the workload of nurse leaders including volume of direct reports and scope of responsibility. The goal is to keep nurse leaders interacting with staff and positive in their outlook. Finally, the author recommended the need to establish career development for nurse leaders to keep them engaged in work and committed to the organization.

**Rationale**

The conceptual framework for this DNP project was composed of the IHI framework for improving joy in work (Perlo et. al, 2017) and the challenge-hindrance stressor framework (CHSF) (Crane & Searle, 2016). The CHSF addresses how employees respond to work related stressors to build resilience which is a focus of this project along with reducing anticipated turnover. The IHI framework describes the structure needed to help create a more joyful workplace, as well as the steps unit level leaders can take to create one.

**Challenge-hindrance stressor framework.** The challenge-hindrance stressor framework (CHSF) is based on Lazarus and Folkman's transactional theory (Crane & Searle, 2016). This framework hypothesizes that exposure to certain workplace stressors can impact how an individual develops resilience and suggests there are resilience building and resilience depleting stressors also known as challenge and hindrance stressors. A hindrance would be a

barrier to accomplishing a goal and if left unresolved, can lead to energy depletion and stress. A challenge would be a stressor viewed as an opportunity for growth and development and while depleting energy, improves personal capabilities (Appendix C).

Podsakoff and LePine (2007) performed a meta-analysis to review the relationships among work place stressors, strain, job attitudes, turnover intentions or turnover, and withdrawal behaviors. There were 157 articles chosen for final review, and themes were categorized and measured by the reviewers. Challenge stressors could be role demands, work load, pressure to complete tasks, and overall time urgency. Hindrance stressors were defined as organizational politics, role ambiguity, role conflict, and role overload. In the final analysis, challenge stressors correlated with positive job satisfaction, organizational commitment, and a decrease in turnover intentions, turnover, and withdrawal behaviors. The opposite was true for hindrance stressors, which negatively affected job satisfaction and organizational commitment. The findings of this review validated the CHSF: that there are two different types of stressors, and they impact workers differently.

Crane and Searle (2016) investigated how the stressor event type affected the ability of workers to develop resilience. They recruited 208 employed undergraduate psychology students and measured their work stressors and how they impacted their resilience and psychological strain over a 3-month period. The researchers reported that the capacity for resilience in an individual can be modified by work place experiences. Exposure to challenge stressors can reduce work related strain, whereas exposure to hindrance stressors can increase strain and reduced resilience.

**IHI framework.** The IHI framework for improving joy in work was developed to address burnout, turnover, and low morale of health care workers. The framework is based on

evidence that reports lower levels of staff engagement correlate with poor patient satisfaction, lower productivity, increased workplace accidents, and lower quality patient care (Perlo et al., 2017).

Development of the framework for joy in work, occurred when the IHI staged three 90-day innovation projects with health care leaders on joy in work over 2015-2016 (Feeley, Perlo, Balik, & Mann, 2017). They reviewed literature on engagement, satisfaction, and burnout, then interviewed 30 experts and patients and exemplar institutions, both within and outside of health care. Finally, the team participated in a two-month prototyping program testing steps to refine the framework before releasing it in 2017 (Appendix D).

The Senior Vice President of the IHI, Dr. Trissa Torres (2016), identified several factors that contribute to joy in the workplace. There should be physical safety for all staff, including psychological safety or the ability to speak up when needed. There should be equity so that everyone's voice can be heard and respected, and a sense of comradery among the team. Staff should feel they have a choice in how they do their work, and they should find meaning in work that keeps them engaged and energized.

There is a connection between engaged staff and higher customer satisfaction, productivity, profit, lower rates of accidents, and employee turnover (Harter, Schmidt & Killam, 2003**)**. According to the National Patient Safety Foundation (2016), an engaged workforce provides more effective, safer care and is more satisfied and less likely to leave an organization or the profession.

According to the IHI framework once you understand why this work needs to be done, the second part is to define how it can be done. There are 4 questions a leader should ask their staff and the first one is simply, "What matters to you?" This engages the employee to share

what is important to them, rather than what you need from them. The second question is what gets in the way of what matters to you? These are referred to as "the pebbles in your shoes" that get in the way of what is important. A key concept is that first two steps are a focus on listening, not doing.

The third step is to create a shared partnership to improve the workplace where all can make contributions. The idea is that everyone does not do everything but that there are nine components that contribute to a happy, healthy, and productive workforce. The rings of the framework describe what senior leaders, managers, and individual staff are responsible for in the organization.

There are five fundamental human needs that must be met to improve joy. These five needs are physical and psychological safety, meaning and purpose, choice and autonomy, camaraderie and teamwork, and fairness and equity. All five needs do not need to be met to proceed to step 4, but they do need to be addressed if long-term results are the goal. The final step of the framework is to incorporate improvement science to measure how the ideas are improving productivity and effectiveness of the work environment (Appendix E).

**Specific Aims**

To implement the IHI Framework for Improving Joy in Work for unit level leaders in a peer group setting which may lead to:

a) Decreased unit level leader anticipated turnover as measured by a decrease in the ATS by 5%.
b) Increased unit level leader resilience as measured by the CDRS by 5%.
c) Increased unit level leader proficiency by implementing and measuring one staff engagement or quality outcome project; all by July 1, 2018.

## Section III: Methods

### Context

The key stakeholder for the DNP project was the hospital Chief Nurse Executive (CNE) who supported the goals of the joy in work program. She identified leadership turnover as a key factor in unsustained unit practices, poor staff morale, and lack of goal achievement. Originally the proposal was that unit level leaders from one service area of the hospital would be recruited to participate in the proposed intervention. Just prior to the start of the program, the CNE asked that all the leaders from all services be included bringing the total number of participants from the original 6 to 11. The CNE paid for the cost of the program out of her budget and supported the time needed for lectures and projects. The goal for the CNE was to decrease leadership turnover and increase the team's resilience and effectiveness as leaders.

### Intervention

The intervention for this DNP project included the introduction and implementation of the IHI framework for improving joy in work. This consisted of a 12-week education program offered by the IHI, called Finding and Creating Joy in Work. The format included 6 web-based bi-weekly lectures as well as 3 coaching calls to answer team questions and highlight bright spots. Completion of the program required unit level leaders to submit a series of mandatory assignments. Six continuing education credit hours were provided to program participants if assignments were completed and an online evaluation form was completed within 30 days of the course end date. The goal of bringing the unit level leaders together in a facilitated peer group setting was to create a supportive environment to learn the framework and to discover how to improve the conditions that contribute to joy in the workplace.

The program *Finding and Creating Joy in Work* (Joy in Work) was chosen because the IHI is a leader in performance improvement methodology and education for health care leaders. Goals of the program included the following (Appendix F).

- Recognizing the value of increasing joy in an organization, and the key leadership behaviors that raise staff engagement and improve joy.
- Identifying how behaviors that increase joy in work, can improve patient safety and outcomes.
- Having unit level leaders discuss joy in work with staff by using the "what matters to you" conversations.
- Identifying and testing two changes in the organization that will lead to greater joy in work and two measures to determine if joy in work is increasing.

**Measures:** The efficacy of the intervention was measured using two tools, the *Conner-Davidson Resilience Scale* and the *Anticipated Turnover Scale* (Appendix N, Appendix O). Both were given to participants prior to the intervention, and then again following program end date. The goal was to see whether there was an increase in resilience scores and a decrease in the anticipated turnover scores of unit level leaders. During the 3-month intervention, participants were encouraged to identify and implement staff engagement/improvements projects.

If unit level leaders can see beyond work stressors and find meaning in their work, they may be better equipped to guide their teams to do the same. Facilitating the Joy in Work program with a group encourages peer relationship development among unit level leaders. Providing unit level leaders with the skills to identify and measure issues and implement and support changes in their units, will help build their resilience and proficiency as leaders and potentially decrease their turnover (Appendix G).

**Gap analysis.** Leadership turnover and staff engagement can impact organizational culture. The internal data on manager turnover in the organization was quoted as 44%; that could include movement due to promotion, a lateral move, a choice to reduce to a lower management level, return to the bedside, or exit from the organization. Regardless of the reasons, such a high amount of turnover is disruptive to work groups and makes it hard to achieve organizational goals in a competitive health care market. The medical center had turnover in 3 out of 4 director positions, and 3 out of 5 manager positions.in under a year. Of those who were seasoned in their positions, the longest tenure was 3 years. One of the director positions had been filled by an interim leader, and the Chief Nurse Executive was also new in her role.

The *People Pulse* is an online staff engagement survey done each year across the organization. According to Harter, Schmidt and Killham (2003) there is a correlation between employment engagement and organizational outcomes. The survey is anonymous, and staff are highly encouraged to complete it. The number of staff who respond is an indicator of engagement. Key indices of *People Pulse* are the work unit index, the workplace safety index, and the speaking up index. Feedback is provided to leaders on unit level scores, how they compare from previous years, and how far they are from industry leaders. In 2017, the completion rate for the survey was average for the organization, but within different service lines there was a wide variation in completion rates and scores. People pulse scores and leadership turnover at the medical center were key data points in the gap analysis, that helped formulate a plan to reduce leadership turnover and at the same time, improve leadership effectiveness.

**Work breakdown structure (WBS).** A WBS of the project was completed, and subheadings of the project included data analytics, project management, implementation, and learning and development (Appendix H). The data section included developing process

measures, creating pre-and post-intervention measurements, and evaluating the results. The project management tasks included scheduling the meetings, booking rooms, taking minutes, and following up on any issues related to the project. The implementation required participant selection, defining responsibilities, communication, and providing feedback on progress. Learning and development utilizes existing curriculum, tracks learning objectives, teaches/facilitates classes, and supports dialogue and change management.

**Project timeline.** Project planning started in February 2018 with a team meeting to discuss all aspects of the Joy in Work program, including time commitments, sponsorship and goals. The formal program was scheduled to begin March 1, 2018 and continue until May 24, 2018 (Appendix I). The Project Director (PD)/DNP student sent out calendar invites for the weekly meetings, booked rooms, and provided all audio-visual equipment needed to view the lectures. All unit level leaders were provided a folder containing a printed copy of the IHI framework for Improving Joy in Work (2017). The timeline included a plan to administer a survey to unit level leaders prior to the start of the program and then again, upon completion.

**SWOT analysis.** A SWOT analysis of the team and the work environment was performed, and all areas of weakness and opportunities were explored (Appendix J). The strength of the organization was executive support for the program, an organizational culture of quality, and openness of the participants to self-development. Challenges were the untested nature of the IHI program, potential labor work stoppages, and an inability to control all the professional challenges faced by the participants. Opportunities included decreasing unit level leader turnover, improving their resilience, and increasing staff engagement. Threats included leadership turnover during the intervention, an inability to control the workload of the

participants, or any unplanned competing priority impacting attendance. Analysis of the benefits of the program were still compelling enough to proceed.

**Project budget/return on investment.** The cost of the IHI program varied depending on the number of attendees. Many of the costs were internal but an effort was made to quantify the time dedicated to the project by the participants, as well as the facilitator to provide an overall cost of the project (Appendix K). The costs of replacing a leader using their base salary and estimated replacement costs was also calculated. Costs to replace leaders includes recruiting and orienting a new hire into their position. In the final evaluation, the program costs were significantly less than the cost of replacing the leader (Appendix K).

The IHI program is not a source of revenue for the organization so the value can be found in an analysis of the avoidance of cost associated with unit level leadership turnover. Calculating the average cost of a leader's salary against the cost of the program demonstrated a positive return on investment (Appendix L).

**Responsibility/communication plan**. The overall project management of the program was overseen and organized by the PD. The PD booked the conference rooms, made sure that leaders had time to attend the learning sessions, including calendar time and support to prioritize existing work with project work (Appendix M). Each unit level manager, reported to a service line director who was also provided information about the program. The CNE was provided biweekly updates by the PD during one on one meetings.

## Study of Intervention

The plan was to measure resilience scores (using the *Conner-Davidson Resilience Scale*) of unit level leader participants before and after completion of the Joy in Work Program. During the same pre and post intervention data collection, they were also asked to respond to questions

about their intent to remain in their existing positions, using the *Anticipated Turnover Scale*. Both tools were uploaded into Qualtrics as well as a question to determine length of time in existing role.

Prior to the start of the Joy in Work Program, an email from the Qualtrics program to each participant's work email encouraged them to complete the pre-survey. Participants were informed that their responses would be blinded to ensure anonymity. At the completion of the program, questions from the same two tools were uploaded into Qualtrics to create a post-survey. Several questions were added to the post-survey to determine if participants had completed the program, and an open-ended question was added asking to identify reasons why, if the respondent had not completed the program. As with the pre-intervention survey, participants were assured anonymity of their responses on the post-survey. Pre and post joy in work survey total scores for each tool were calculated for each participant then mean scores were calculated. Then a comparison of pre and post joy in work survey mean scores was done to determine if there were measurable changes.

**Measures**

**Conner-Davidson Resilience Scale.** The *Conner-Davidson Resilience Scale* (CDRS) was created during research on the identification and treatment of post-traumatic stress disorder in men and women (Conner & Davidson, 2017). The instrument is comprised of 25 questions with Likert-type responses ranging from 0=never to 4=almost always. The summation of all scores ranges from a minimum of 0 to a maximum of 100. The higher the score, the greater the resilience (Appendix N).

In the U.S. general population, the median score was 82, with quartile 1 being 0-73, quartile 2 was 74-82, quartile 3 was 83-90 and quartile 4 was 91-100 (Conner & Davidson,

2003). The instrument is written at a grade 5 education level and has been used in both clinical and non-clinical populations. The CDRC showed acceptable test-retest reliability and construct validity (2017). Written permission to use the CDRC was obtained prior to its use. (Appendix Z).

**Anticipated Turnover Scale (ATS)**. The ATS was created to measure a nurse's intent to leave their current position (Barlow & Zangaro, 2010). The scale is comprised of 12 questions with a Likert-type scale that ranges from 1 to 7, where 1 is 'strongly disagree' and 7 is 'strongly agree' (Barlow & Zangaro, 2010). The higher the score, the higher the likelihood of intent to leave. The scale is easy to read and at a reading comprehension level of nurses and should take 5 minutes to complete (Appendix O).

Barlow and Zangaro (2010) evaluated the validity and reliability of the ATS by performing a comprehensive meta-analysis. They evaluated 12 studies including 5 articles, 5 dissertations, 1 pilot study, and 1 unpublished report that used the ATS to collect data (Barlow & Zangaro, 2010). The pooled results demonstrated a reliability score of 0.89, and a validity of -0.529 using a confidence interval of 95% (Barlow & Zangaro, 2010). Based on these findings, the authors concluded the ATS is a user-friendly instrument that can accurately and precisely measure intent to leave an organization/unit.

**Other measures.** Both the CDRC and the ATS were transcribed into a Qualtrics survey format. One question was added to the pre-joy in work survey to measure the unit level leaders' time in their current role. The goal of this data was to describe the overall experience level for participants.

On completion of the IHI joy in work program a second Qualtrics survey was developed using the same CDRS and ATS questions. The survey was expanded to include questions about whether participants completed the IHI joy in work classes? Did they receive the certification,

including CEU's from the IHI? Unit level leaders who did not complete the program could respond to an open-ended question, with reasons why. After completion, each survey was checked for completeness of responses to all items, all were complete.

**Analysis**

Data collected through the Qualtrics surveys prior to the start of the program were not analyzed until the program was completed. The reason was to eliminate any bias that prior knowledge of the test scores might introduce into the program. Each unit level leader was identified by a letter of the alphabet so that they could remain anonymous, but also allow for comparison of individuals if appropriate. One difficulty in data analysis was how to address the variation in participants who completed the initial survey versus those who did not, and how to address participants who did not complete all elements of the program. After careful consideration of the validity of the results only scores of unit level leaders who completed the joy in work pre-survey, completed the IHI Joy in Work Program and received a completion certificate, and completed the joy in work post-survey were included in the data analysis.

The number of unit level leaders who completed this quality improvement project was small and therefore unlike a research project, there is not generalizability of the findings. There was no control group for comparison, so no assumptions could be made about the scores of the participants compared to non-participants. As an evidenced based change of practice project generalizability and comparison with a control group were not goals of the project. The results can be compared with the scores of other groups that have used the CDRS to measure resilience.

The plan for data analysis was to begin by describing demographic distribution of the group in tabular form. Next, data analysis of both the CDRS and the ATS focused on computing individual total participant scores for each instrument, calculate group means for each

instrument, and then compare pre and post-intervention mean scores. Responses to the post intervention qualitative questions were explored for themes.

**Ethical Considerations**

According to Ondrusek et al. (2015), the boundaries between research and evidence-based practices have blurred and many activities labeled non-research are associated with risks to participants and are not subjected to ethical oversight. The Public Health Department in Ontario, Canada developed and tested a risk screening tool available for public use through their website. There are five sections on this tool: administrative screen, sensitivity, participant selection, recruitment and consent, data/sample collection or access, identifiability and privacy issues, and commercial interests. Prior to the start of the project, all five sections of this tool were completed resulting in an overall score of 2 deemed, minimal risk (Appendix P). Based on this tool and the evaluation of this project by my DNP Committee at the University of San Francisco, this project was deemed as an evidence-base change of practice project, not research, and therefore did not require Institutional Review Board of the Projection of Human Subjects (IRBPHS) approval by the University.

It is problematic to have as a participant group, unit level leaders who have a direct or indirect reporting relationship with the project director/facilitator of the program. As much as one would like to believe that employees feel safe to disclose sensitive information, in truth that may not be true for all unit level leaders. The priority is to protect the participants from any harm during the project and ensure confidentiality. There is also a need to balance what occurs when unit level leader attendance or work productivity wanes during the program. Are the unit level leaders volunteers or is this an expectation of their employment? The decision was made to make

it voluntary, even though the cost was supported by the organization, for two reasons because it was deemed a DNP project and the need to support confidentiality.

**Jesuit values**. The University of San Francisco was founded by the Jesuits in October 1855 (DNP Handbook, 2016). The Jesuit values can be found embedded in core values of the Doctor of Nursing program and include, global focus, social justice, leadership, compassion and humanity, development of a moral, spiritual compass and the engagement and use of Ignatian pedagogy for the educational experience (DNP Handbook, 2016). These values guided this DNP Project.

**American Nurses Association (ANA) code of ethics**. The ANA code of ethics contains 9 provisions that provide an ethical framework for the nursing profession (ANA, 2016). Three provisions of the ANA code of ethics particularly guided this DNP Project. The first provision outlines respect for human dignity and the right to self-determination. Provision 3 refers to the rights of individuals to privacy and confidentiality and protection when participating in research (ANA, 2016). Provision 7 states that nurses should contribute to the profession through research and scholarly inquiry (ANA, 2016).

This project used evidence-based interventions to improve the experiences of unit level leaders. This demonstrated both the core values of the DNP program and the ANA code of ethics. All steps of the project sought to protect and respect the individual participants with compassion and humanity and to advance the profession of nursing.

## Section IV: Results

Of the original 11 unit level leaders who were registered for the IHI Joy in Work Program, 9 completed the joy in work pre-survey, a response rate of 82%. Only 6 (55%) of the

original 11 completed all the steps of the program to receive their certificates from IHI (Appendix Q). Of those 6 leaders, only 5 (45%) completed the joy in work post survey despite repeated attempts to encourage all to participate. There were 2 unit level leaders who completed pre-and post-surveys but did not complete the class. They were encouraged to provide information on why they were unable to finish the program, and both stated that increased demands at work impacted their ability to remain focused on the program. The 5 unit level leaders who completed the program had an average of 1.5 years' experience in their present roles.

**Conner-Davidson Resilience Scale (CDRS)**: The mean pre-intervention CDRS score for the 5 individuals who completed both pre-and post-intervention surveys and received their IHI Joy in Work certificate was 74.4. The mean post-intervention CDRS score for the same 5 participants was 74.0. In their published data on all the studies that have used the 25-question scale, Conner-Davidson (2017) did not include any studies with a sample size smaller than 9. The small sample size cannot be considered valid, despite the reliability of the tool with larger samples (Appendix R).

**Anticipated Turnover Scale (ATS):** The higher the score (1-7) on the ATS, the more likely the individual is not satisfied in their current role and will leave. Conversely the lower the score, the more likely an individual will stay in their current role. Pre-intervention mean ATS scores of the unit level leaders who completed the program was 3.36. Post-intervention mean ATS scores for the unit level leaders who completed the program was 2.75. A comparison of the pre and post-intervention mean ATS scores revealed an improvement of 18% after completion of the IHI Joy in Work Program (Appendix R).

These findings would imply that of the individuals who completed the IHI program, there was a positive shift in their intent to remain in their current role. Completion of the program may not have demonstration improved resilience scores but keeping five leaders in their present role is a positive outcome for the teams they lead and the organization.

**Participation in IHI Joy in Work Program.** According to the first IHI coaching call, there were 886 attendees enrolled in the Joy in Work Program from 44 U.S. states and 11 countries, all with diverse health care backgrounds and roles. The first class was held March 1, 2018 and leadership changes had already occurred with 2 participants, one had taken a leave and the other had resigned.

Unit level leaders could choose to watch the lectures on their own, but early feedback from the group was that taking the classes together and discussing what they had learned, or challenges they were having in their departments, was preferred. It is unrealistic to expect that participants not take vacation, or have departmental issues arise that will take their focus and energy away from a 3-month program. The PD offered participants date and meeting time changes to allow for flexibility, and followed up with individuals when they did not attend. Although the IHI Program Joy in Work was paid for by the organization, there was not a mandate to make attendance or participation mandatory, this may have impacted completion of the IHI program and achieving project aims.

**Assignments in Joy in Work Program.** The first assignment required the unit level leaders to sign into the IHI website to create their own account which is also where they would be submitting their assignments. The IHI did not post all the lectures at once but did provide downloadable transcripts after class was released. Unit level leaders were also encouraged but

not required to sign into a private Facebook page created by the IHI, to allow program participants to discuss and share learnings.

The second assignment was to submit a self-assessment to help unit level leaders understand the current state of their joy in work (Appendix S). This assignment was confidential and uploaded directly by all unit level leaders individually onto the IHI website. Unit level leaders were also required to review pertinent data from their departments like staff satisfaction surveys or quality outcomes. This data could be used to drive process improvement changes in the department.

As the sessions continued, the content of the program changed from informational to inspirational but so too did the expectations of the participants. Assignments became more complex as theory moved into practice. Some unit level leaders could keep up with assignments while others seemed to keep missing submission deadlines. To make it easier the unit level leaders could create a team assignment which could be developed and shared with the team, but everyone was responsible for uploading the assignment under their own sign on.

The third assignment was to create an elevator speech that would explain the joy in work program to staff and peers and set the stage for "what matters to you" conversations (Appendix T). Next came the project charter which outlined the goals of the project that would be performed during the joy in work program (Appendix U). Unit level leaders were also required to start having "what matters to you" conversations even if it was just with one another. After the charter was completed, a Plan-Do-Study-Act (PDSA) cycle needed to be developed and uploaded onto the IHI site (Appendix V).

**Nurses week.** The PD developed ways to keep the team on track whether it was getting them to attend the sessions/lectures or completing the assignments. It was a goal to try to take work that unit leaders were already doing and build in the concepts from the class, rather than try to make it one more thing they needed to get done. Nurses week afforded opportunities to encourage the "what matters to you" conversations with staff. Each leader was asked to create a template that would encourage staff to define what gives them joy at work. The day food was served to all the units was the day chosen to create opportunities during shared meal time to have staff complete a survey asking them what brings them joy at work. Each unit chose a theme to celebrate the day, decorated the unit, and dressed up.

The units with the highest leader participation in the program, also had the highest response rate to staff surveys created for this event. The information from these staff surveys was tabulated, and two central themes emerged. Staff identified that their team mates and the patients they take care of were the two primary sources of joy at work. The completed staff surveys were left up on the walls as decorations for the remainder of the week (Appendix W).

The final assignment for the IHI joy in work program was to create and upload a power point, with learnings from the program, that could be shared with other members of the organization or staff (Appendix X). The last week of video lectures concluded right after nurse's week and required unit level leaders to upload another self-evaluation form (repeat of the original survey) and the course evaluation. There was one more coaching call done with the IHI joy in work facilitators that encouraged all program participants to keep the momentum of the work moving forward.

For many unit level leaders, there is a gap between knowing what needs to be done and accomplishing the work. The IHI program provided education on improvement science, but

without organizational support to achieve certain goals within timelines, the next phase of the project was in jeopardy. The medical systems that were featured by the IHI as having robust joy in work programs, had support at the highest level of the organization to make the work a priority and some level of organizational infrastructure to support it.

As the program ended, no unit level leaders had initiated a measurable performance improvement project to help improve joy in work, but that is not to say that they did not take some of what they learned and applied it to the staff they managed. Unit level leaders had previously learned from staff surveys that patients are a key joy for their staff. Knowing this, they tried to bring more feedback from patient surveys and comments to their workgroups. Knowing that co-worker relationships are important, unit level leaders focused their efforts on having daily huddles to bring the teams together. These huddles could be used to address pebbles, successes, and information they need to do their jobs and make unit progress. Just knowing how much staff value each other, gave leaders a chance to build this into how they did their work, focusing on the importance of engaging their employees.

## Section V: Discussion

### Summary

Some but not all the project aims were achieved for this project. There was a measurable decrease in intent to leave as measured by the ATS scores of the participants who completed the program from pre-to post, by 18%. This exceeded the original goal of 5%. There was no measurable increase in nurse leader resilience as measured by the CDRS.

Only 5 of the original unit level leaders completed the IHI Joy in Work Program. Unit level leaders who had difficulties managing their workloads, cited that as a primary reason for lack of completion. That would suggest that for unit level leaders to be successful in completing

the IHI program, strategies to help them manage their priorities might improve the completion rate. The only unit level leaders who completed the course, all reported directly to the PD. This may be due to two things, they may have felt more obligated then other unit level leaders to attend if they knew their director was present. Secondly having their director also be the PD of the program, allowed for opportunities during one on one discussions, to help prioritize their work and to encourage joy in work activities. This may suggest that participation from the other directors might have improved the attendance and outcomes from the unit level leaders not supervised by the PD.

There was a sense of shared accomplishment from the unit level leaders who completed the program and they continued to seek out ways to continue to engage their staff. Regular huddles were performed in all departments so that each staff shift could participate. Prior to the IHI program, huddles had not been routinely performed in all departments or every shift. The unit level leaders understood the value of bringing teams together to focus on quality outcomes.

While the only measurable project completed by the end of the program was measuring what brings staff joy during nurse's week, all departments participated in poster submissions at the local medical center that highlighted their work areas and what brings each team joy at work. One team won a regional award for participation in a fitness program at work. Another team choose to dress in themes around holidays and continue team celebrations by decorating the unit for patients. At the end of the summer, several of the leaders organized a staff BBQ to thank teams for their hard work. It was well attended and again focused on all the different staff who work in the departments.

Recently the staff had the chance to take the yearly staff *People Pulse* survey and the response rate from the units with a unit level leaders who completed the IHI program was 92%

versus the regional average response rate which was 83%. The results of the *People Pulse* Survey will be distributed to the unit level leaders in December 2018.

Patient outcomes were not directly identified as a goal of the project but could be a a focus of participation in the IHI Joy in Work program in the future. The IHI framework is about changing a culture to focus on the key elements that create a happy, healthy, and productive workforce. Unit level leaders are also responsible for creating environments that encourage comradery and teamwork that should translate into improved patient outcomes.

**Interpretations**

The role of the unit level leader is vulnerable to a multitude of stressors and challenges, as defined by the challenge-hindrance framework. The struggles leaders face can erode their ability to cope. Nurse managers who are left unsupported will experience stress and burnout and are more likely to leave their role (Steege et al., 2017; Warshawsky & Havens, 2014). Leaders need to believe that overcoming adversity will make them stronger and more effective in their roles and need to learn how to reframe negative experiences and stressors in the work place into opportunities and learning experiences (Helmreich et al., 2017; Steege et al., 2017).

Investing in leadership development must be an ongoing commitment from health care organizations (Udod et al., 2017; Warshawsky & Havens, 2014). The formation of a peer group to allow for networking and social support is a key intervention especially if it is approved by directors and executives (Helmreich et al., 2017; Hudgins, 2015; Loveridge, 2017; Udod et al., 2017).

The scope of the nurse leader role needs to be evaluated to allow for more time to interact with front line staff (Loveridge, 2017; Steege et al., 2017; Udod et al., 2017; Warshawsky & Havens, 2014). Managers need tools to encourage self-care and work life balance to continue to

have the energy to stay engaged and optimistic in the challenges of the role (Helmreich et al., 2017; Loveridge, 2017; Steege et al., 2017).

The Joy in Work Program, did allow the participants to reframe the challenges they faced into positive experiences, just by focusing on the merits of the individuals in the work environment. A peer group was created through weekly meeting time, experiencing the lectures together but also by sharing some of the frustrations and challenges they were facing throughout the week. Listening to staff talk about what brings them joy allowed unit level leaders to understand and appreciate their teams in a positive way. Sharing in a large project whose aim was to bring joy and engagement to staff, gave them more confidence to lead in a way that encourages listening and understanding.

The unit level leaders approached their jobs differently after attending and listening to the IHI lectures. They may not have accomplished every goal of the program, but changing an organizational culture takes time. Most importantly these leaders are still in their roles and working with their teams to continually improve the care of the patients and the system they serve.

**Limitations**

There were risks associated with the implementation of this project. The role of the PD was to prepare the participants for the program and its impact on their day to day workload. This was a new program, offered for the first time by the IHI, access to lessons was limited to the day the lectures were presented. This meant the PD was, learning alongside the participants instead of having a teaching syllabus and access to all the lectures in advance. This limited the effectiveness of the PD to that of a participant rather than someone always leading the program.

There was not always clarity among the team members of the primary focus of the IHI program. Unit level leaders started out believing it was about increasing their joy, only to find out the focus was on their teams and how they lead them. Despite the transparency of the learning objectives, leaders did not always have a sense of what the program was or what would be expected of them.

**Participation.** Participation in the program was optional and therefore not everyone completed the program. The classes were spread out over a 3-month period, which is a long time for unit level leaders to commit to attending weekly sessions. Organizationally there were events and pressures that impacted everyone's ability to stay focused on the program, some more than others.

The unit level leaders may have been concerned about the confidentiality of their responses and therefore may not have been honest. This may have skewed the data either positively or negatively. The findings for a small number of participants may not be a true reflection of the impact of the program. A qualitative analysis tool might have been a better choice for such a small number of participants.

**Time.** The length of the program, 12 weeks, could have been a limitation as competing priorities within the daily work of a unit level leader could have interfered with their commitment to the project. The goals of the program were ambitious, both identifying changes that would result from greater joy in work and how to measure those changes. Once classes were done, unit level leaders were not required to continue to meet and work on the project even though not all aspects of the program had been implemented or tested. This limited a thorough evaluation of the effectiveness of the program. In the future, a longer program that allowed for

participants to continue their implementation beyond the 12 week IHI program might yield more results.

**Organizational sponsorship.** The IHI framework for improving joy in work outlined responsibilities for senior leaders, managers and core leaders, as well as staff. The impact of the program may have been limited because all elements of the framework were not implemented. Also in this organization, only the unit level leaders were introduced to this program. The lack of inclusion of front-line staff would need to be addressed if the full impact of the framework is to be evaluated.

In the future, more pre-planning and education would help to make sure that IHI Joy in Work Program participants are given the time they need to get maximum benefit from the lessons and time with peers. This would also help unit level leaders to identify and work on performance improvement opportunities on their units.

## Conclusions

In the short term, the goal of the project was to inspire unit level leaders to connect with their work and feel invigorated and engaged in a new learning opportunity. It brought together a peer group to try to increase resilience by creating a support network. While resilience did not increase for the participants, other positive effects did occur such as a decrease in anticipated turnover. Learning from the IHI Joy in Work program provided thought provoking analysis of their purpose as leaders and their teams. The long-term goal is that unit level leaders will find success and satisfaction in their roles and choose to stay in their present roles. The data suggests that participation in a structured learning environment that focuses on improving joy and staff engagement can impact a leader's intent to remain in their role.

## Section VI: Other Information

### Funding

Direct payment for the IHI Finding and Creating Joy in Work program, was approved by the CNE at the medical center and paid for by Kaiser Permanente (KP). KP qualified for a significantly reduced tuition due to scholarships from the IHI. According to Robeznieks, (2006) the relationship between KP and the IHI dates to December 2004 when it was announced that KP would be donating 10 million dollars to the IHI. The investment would allow KP staff to attend IHI education and training programs for the next 15 years and cement a partnership to achieve improvements in patient safety and care delivery. This DNP project has been a continuation of that collaboration created over 14 years ago.

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## Appendix A: Review of Evidence (1 of 4)

| Citation | Conceptual Framework | Design/ Method | Sample/ Setting | Variables Studied and Definitions | Measurement | Data Analysis | Findings | Appraisal: Worth to Practice |
|---|---|---|---|---|---|---|---|---|
| Hudgins, T.A., (2016). Resilience, job satisfaction and anticipated turnover in nurse leaders. | Polk mid-range nursing theory on resilience | Quantitative: demographic data, Conner Davidson resilience scale (CDRS), single item job satisfaction scale and anticipated turnover scale (ATS). | Convenience sample of 495 nurse leaders located in SW Virginia, 8 hospitals. 89 completed online surveys, 17% response rate. Majority were nurse managers. | Resilience<br><br>Job satisfaction<br><br>Anticipated turnover | Descriptive statistics used to analyze demographic data. | Descriptive statistics used to analyze demographic data. Cronbach alpha conducted for CDRS, and for ATS. Pearson correlations used to analyze relationships between continuous variables. | Regression analysis revealed relationship between job satisfaction and anticipated turnover. Resilience scale correlated with intent to remain. This was a strong correlation | **Strengths:**<br>Strong statistical analysis.<br><br>**Limitations:**<br>Email sent via corporate email to senior leaders then disseminated, might have led to lower than expected response rate.<br><br>**Critical Appraisal Tool & Ratings**:<br>John Hopkins Research Evidence Appraisal Tool Level II<br>Quality: High |

## Appendix A: Review of Evidence (2 of 4)

| Citation | Conceptual Framework | Design/ Method | Sample/ Setting | Variables Studied and Definitions | Measurement | Data Analysis | Findings | Appraisal: Worth to Practice |
|---|---|---|---|---|---|---|---|---|
| Udod, S.A., Cummings, G., Dean Care, W., Jenkins, M., (2017) Impact of role stressors on health of nurse managers | Lazarus and Folkman's stress and coping theory. | Qualitative: Semi structured interviews, and one focus group sessions. | Purposive sampling 23 nurse managers working in large tertiary care hospitals across Western Canada. | Role Stressors<br><br>Coping Strategies<br><br>Health outcomes | Field notes were taken during all interviews and focus group by a research assistant. | Transcripts were analyzed using NVIVO 10 qualitative software to code data segments. Braun and Clarke's 6 phase approach to enhance rigor was applied | Stressors: Working with limited resources. Responding to continuous change in org. and senior manager disconnect<br><br>Coping: plan-full problem solving, social support, reframing.<br><br>Health outcomes were descriptive only. | **Strengths:**<br>Good identification of themes, and analysis<br><br>**Limitations:**<br>Health was not measured quantitatively.<br><br>**Critical Appraisal Tool & Ratings**:<br>John Hopkins Research Evidence Appraisal Tool Level III<br>Quality: High |

## Appendix A: Review of Evidence (3 of 4)

| Citation | Conceptual Framework | Design/ Method | Sample/ Setting | Variables Studied and Definitions | Measurement | Data Analysis | Findings | Appraisal: Worth to Practice |
|---|---|---|---|---|---|---|---|---|
| Loveridge, S. (2017). Nurse manager role stress | None | Descriptive qualitative design | 12 nurse managers from 3 magnet hospitals.<br>2 years or more experience | Series of questions related to nurse manager role | Demographic data collected via email. Participants interviewed using open ended questions. Digitally recorded. | One hour interviews conducted by phone, 4 analysts constructed typology themes. Data analyzed using immersion and reduction. Results verified by doctoral qualitative expert. | 10 of 12 managers had considered leaving position at some point.<br>4 themes emerged: sink or swim-thrown into role with little training or support. There is no end-24 hr accountability and endless task list. Support me-having boss understand their work life, trust them, clear expectations and support when needed. Finding balance-role affects health and personal relationships, need to eat properly and take care of self | **Strengths:**<br>Highlights need to focus on nurse manager turnover.<br><br>**Limitations:**<br>All female participants.83% had master's degree, magnet culture, small sample size<br><br>**Critical Appraisal Tool & Ratings**:<br>John Hopkins Research Evidence Appraisal Tool<br>Level III<br>Quality: Good |

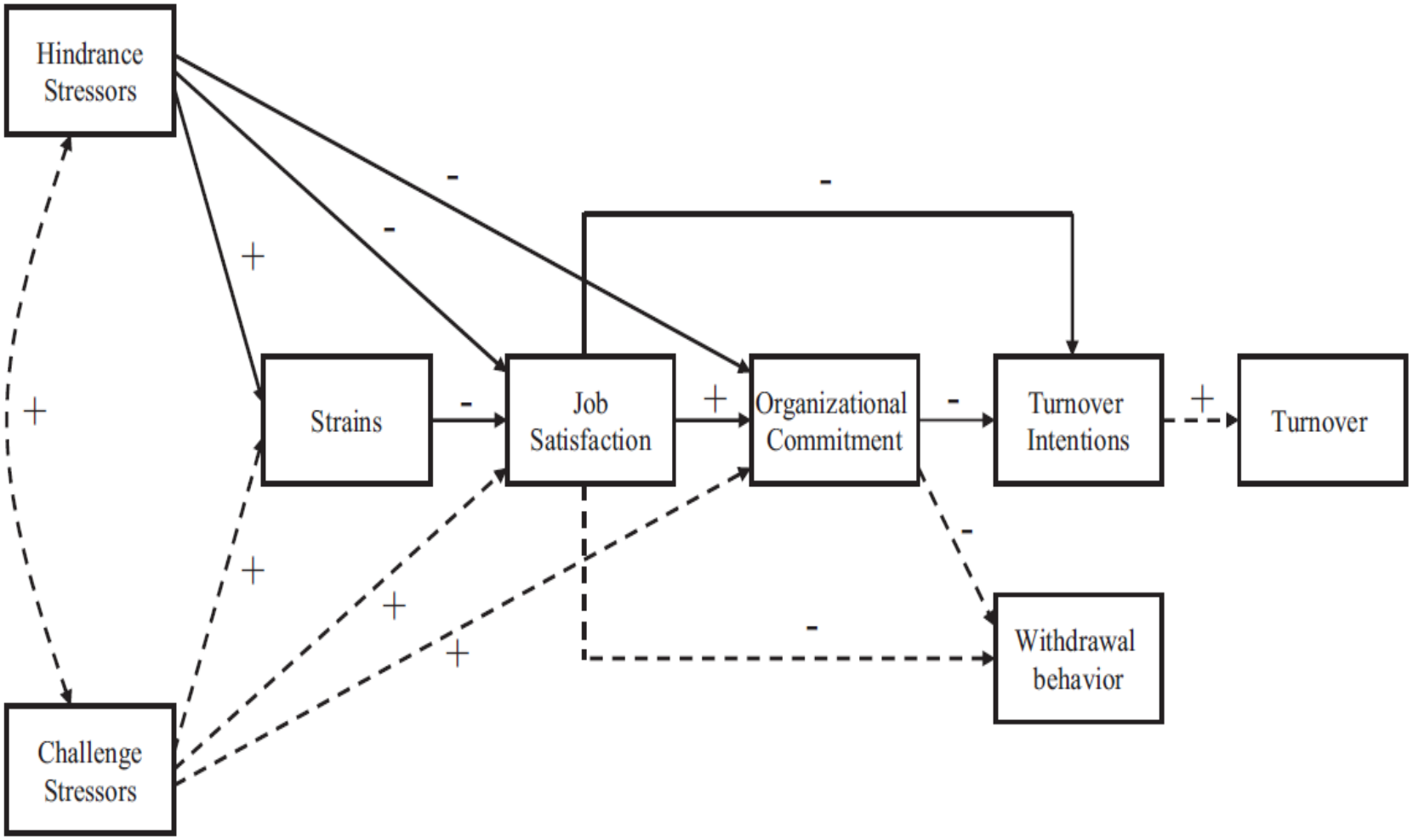
## Appendix A: Review of Evidence (4 of 4)

| Citation | Conceptual Framework | Design/ Method | Sample/ Setting | Variables Studied and Definitions | Measurement | Data Analysis | Findings | Appraisal: Worth to Practice |
|---|---|---|---|---|---|---|---|---|
| Steege, L. M., Pinekenstein, B. J., Arsenault Knudsen, E., & Rainbow, J. G. (2017). Exploring nurse leader fatigue: a mixed methods study. | Occupational fatigue in nursing. | Quantitative and qualitative | 10 nurse managers (NM).<br><br>11 nurse executives (NE).<br><br>2 acute care hospitals | Experiences with fatigue/stressors-types, levels and sources, coping skills and consequences | Interviews all conducted by same person. Semi-structured exploring variables Recorded and transcribed.<br><br>End of interview each participant completed demographic survey and Occupational Fatigue Exhaustion Recovery scale. | Dedoose (2015) cloud-based coding application used for transcription Coding performed by team. 3 authors independent reviewed coded transcripts identified subthemes Scores for scale calculated | All participants reported stress. NM reported more chronic stress than NE. Positive coping strategies included: wellness and restoration, support networks, setting boundaries and positive challenges. Fatigue sources NM: 24/7 work, visibility to staff, interruptions. NE: Meetings, long day, responsibilities. Impact: home life, sustainability in role, pipeline of future leaders, quality of care. | **Strengths:**<br>Qualitative and quantitative study. Good theme exploration<br><br>**Limitations:**<br>Small sample size, homogenous population<br><br>**Critical Appraisal Tool & Ratings**:<br>John Hopkins Research Evidence Appraisal Tool Level II<br>Quality: Good |

## Appendix B: Evidence Synthesis Table

| **Studies** | Hudgins, T.A., (2016). Resilience, job satisfaction and anticipated turnover in nurse leaders. | Udod, S.A., Cummings, G., Dean Care, W., Jenkins, M., (2017) Impact of role stressors on health of nurse managers. | Loveridge, S. (2017). Nurse manager role stress. | Steege, L. M., Pinekenstein, B. J., Arsenault Knudsen, E., & Rainbow, J. G. (2017). Exploring nurse leader fatigue: a mixed methods study. | Warshawsky, N.E., Havens, D. S. (2014). Nurse manager job satisfaction and intent to leave. *Nursing Economics.* 32(1), 32-39 |
|---|---|---|---|---|---|
| **Interventions** | | | | | |
| Resilience | X | | X | X | X |
| Intent to remain | X | X | X | X | X |
| Leadership development | X | X | X | X | X |
| Social support | X | X | X | X | X |
| Self-efficacy | X | X | X | X | X |
| Staff engagement | X | | | X | X |

**Appendix C: The Challenge-Hindrance Stressor Framework**

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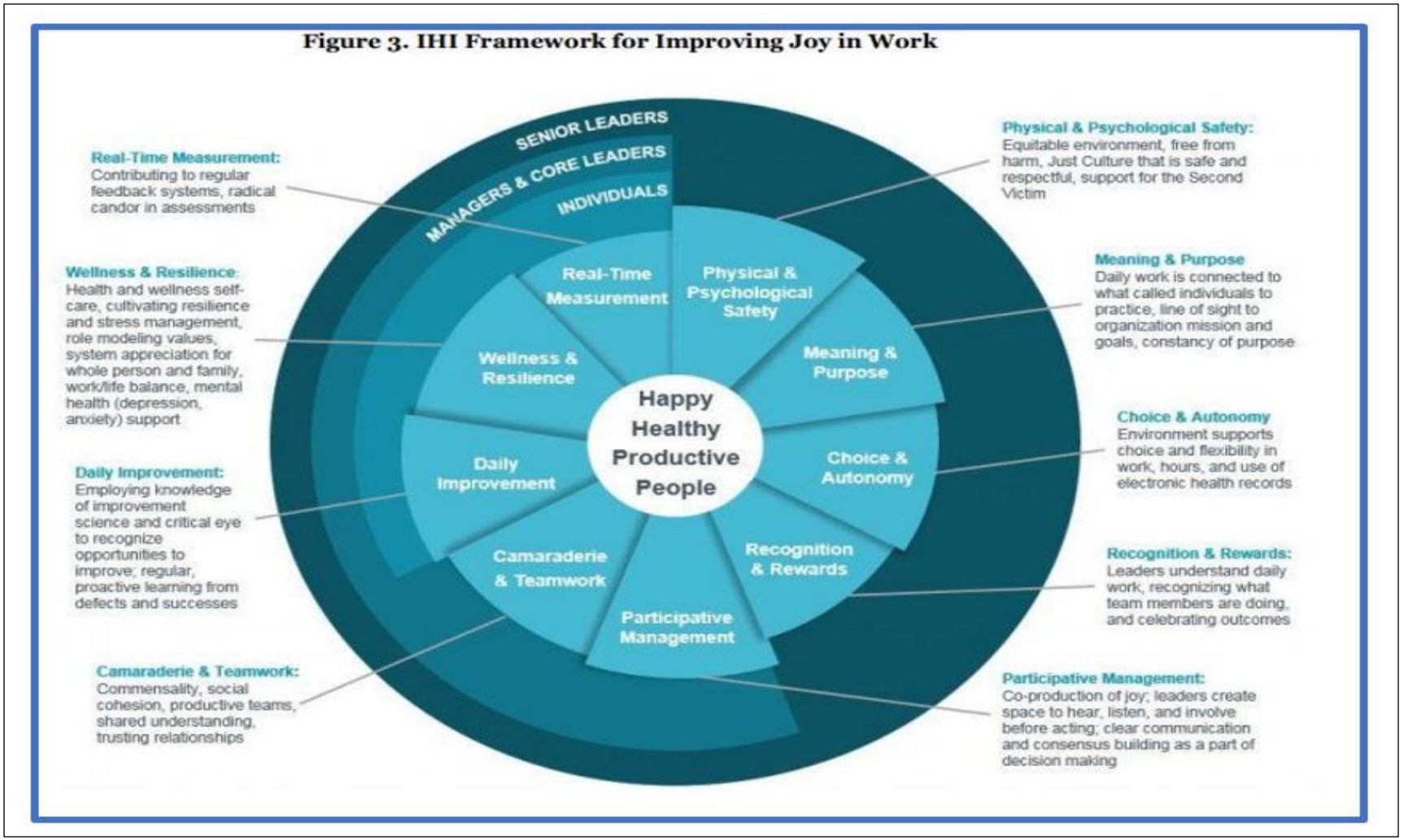
## Appendix D: IHI Framework for Improving Joy in Work

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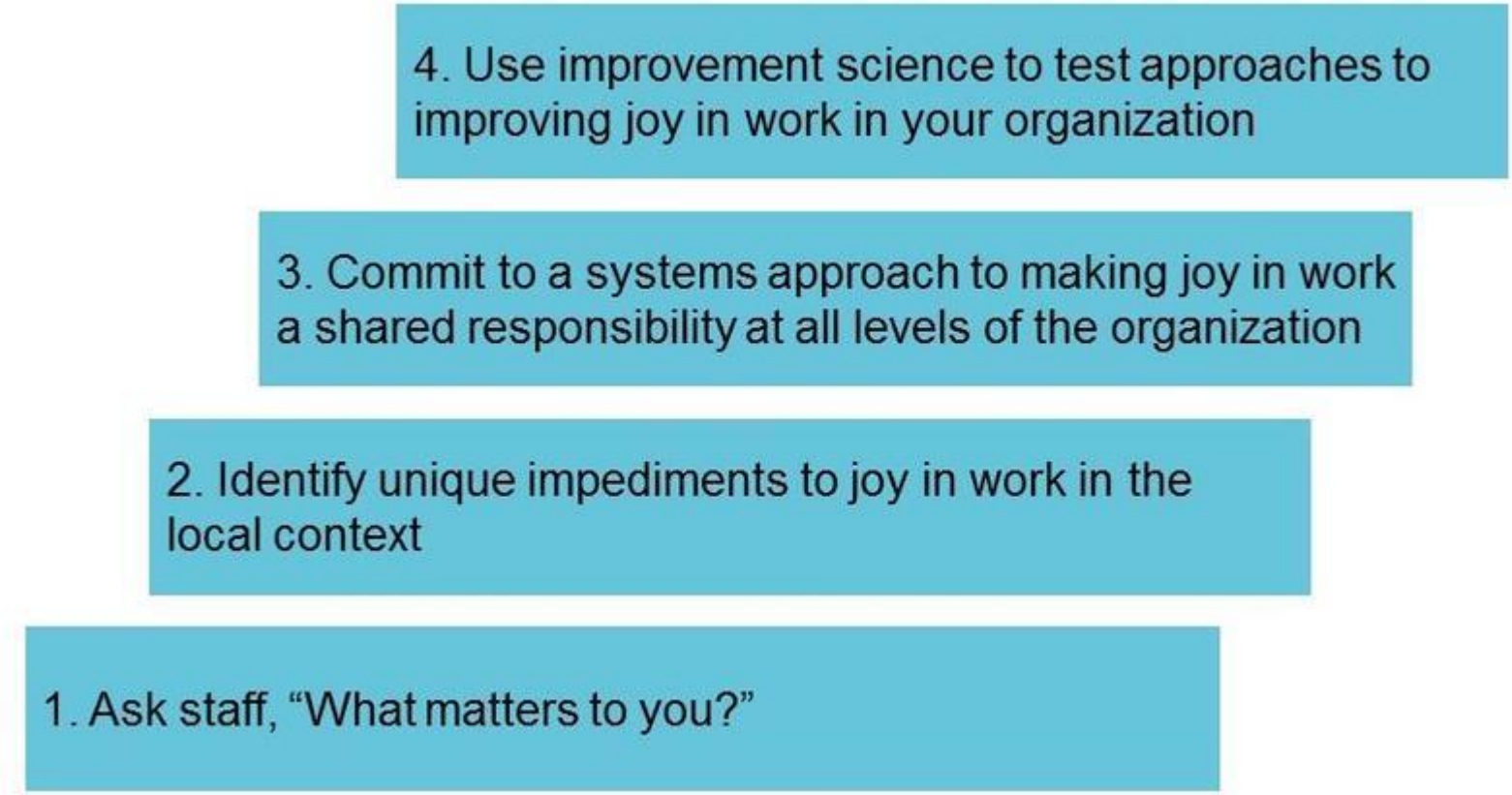
**Appendix E: Four Steps Leaders Can Take to Improve Joy**




Reference: Perlo, et al (2017)

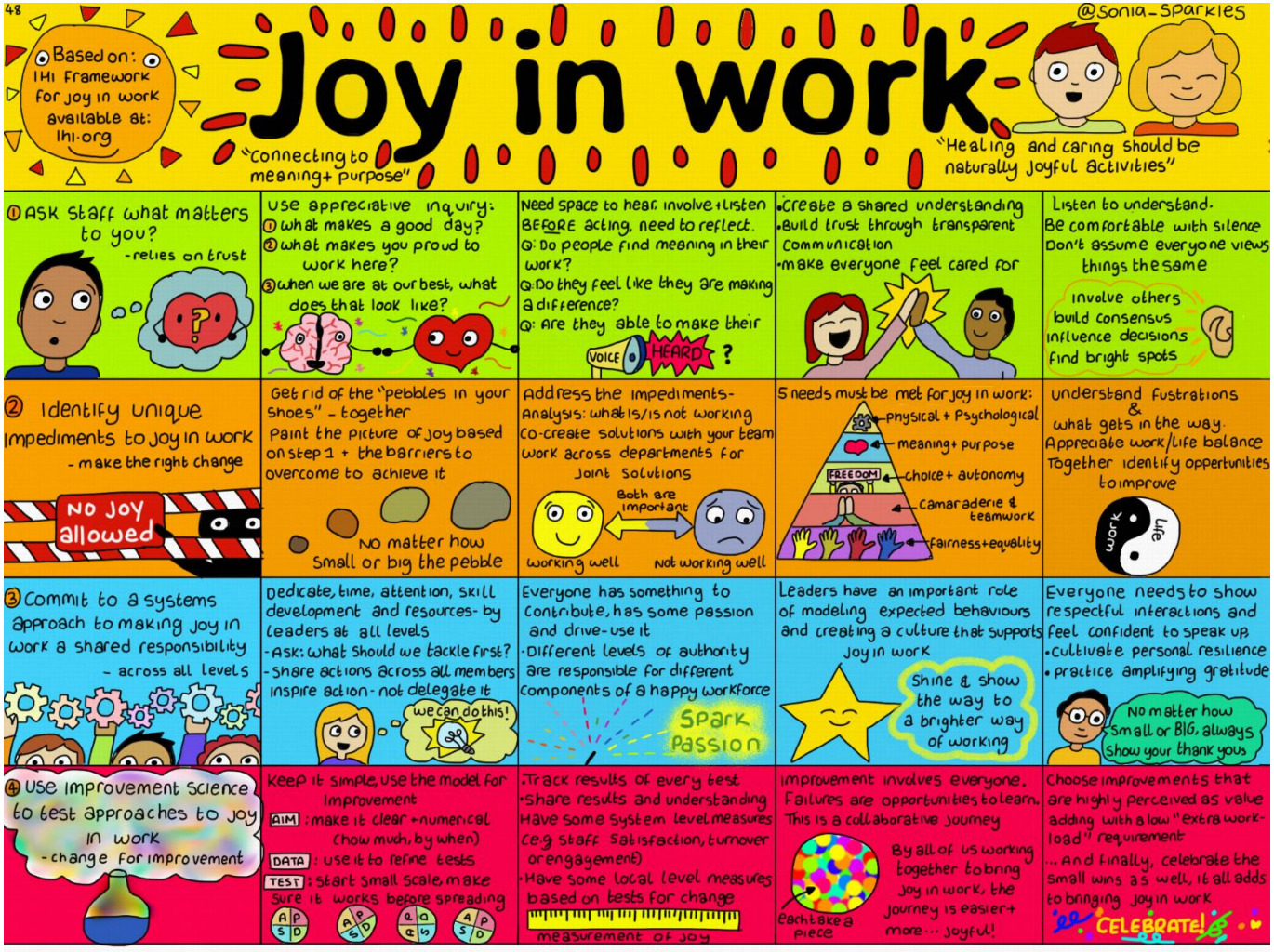
## Appendix F: Joy in Work Class Schedule (1 of 2)

| Lesson | Format | Lecture Titles | Assignments |
|---|---|---|---|
| One: Why Joy?<br>03/01/2018 | Pre-recorded lecture | ▪ Course introduction<br>▪ IHI's Approach to Joy in Work<br>▪ Because I was Burned Out…<br>▪ The Business Case for Improving Joy<br>▪ Why We Needed Joy at Mount Auburn<br>▪ Wrap Up | ▪ Read IHI Framework for Improving Joy in Work<br>▪ Visit the course Facebook page<br>▪ Complete and upload "Self-Assessment" |
| Two: IHI Framework for Joy in Work<br>03/15/2018 | Pre-recorded lecture | ▪ Introduction<br>▪ The Staircase to Joy<br>▪ Why Joy is Everyone's Job<br>▪ Senior Leaders Set the Table<br>▪ The Critical role of Core Leaders<br>▪ Your Role in Improving Joy<br>▪ The Joy of Work Begins at Mount Auburn<br>▪ Wrap Up | ▪ Start collecting or reviewing data on organizations<br>▪ Begin completion of project charter<br>▪ Upload short elevator pitch-(team can upload same one) |
| Three: Finding Pebbles and Getting Buy-In<br>03/29/2018 | Pre-recorded lecture | ▪ Introduction<br>▪ Preparing for "What Matters" Conversations<br>▪ Tips for Successful "What Matters" Conversations<br>▪ Building a Culture of Safety<br>▪ Finding Joyful Leaders and Creating a Joyful Culture<br>▪ Engaging Leadership at Mount Auburn<br>▪ Wrap up | ▪ Review data<br>▪ Have at least two "what matters" conversations with someone on your team<br>▪ Upload project charter |
| Coaching Call #1<br>04/04/2018 | Webex | ▪ Guidance on "What Matters to you Conversations" | |

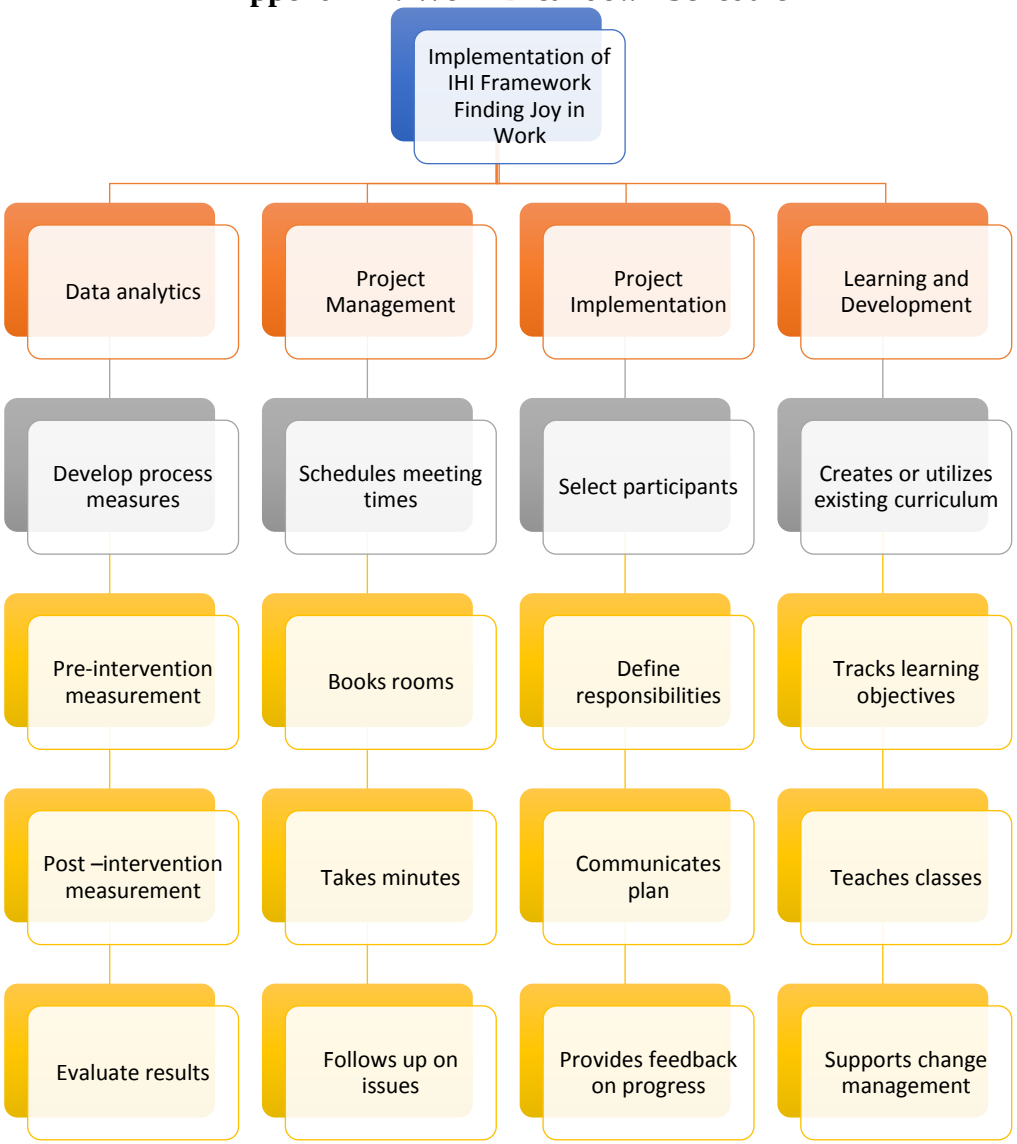
**Appendix F: Joy in Work Class Schedule (2 of 2)**

| | | | |
|---|---|---|---|
| Four: Measuring Joy<br>04/12/2018 | Pre-recorded lecture | ▪ Introduction<br>▪ The Power of the PDSA Cycles<br>▪ The Basics of Measurement<br>▪ How Do You Measure Joy?<br>▪ Measuring Joy in a System<br>▪ Creating Your Own Measurement Plan<br>▪ Measurement Ideas from East London Foundation Trust<br>▪ Wrap Up | ▪ Continue what matter conversations<br>▪ Upload project charter |
| Five: Testing<br>04/26/2018 | Pre-recorded lecture | ▪ Two Stories that Highlight the Need for Joy<br>▪ Making Your Improvements Stick<br>▪ Lessons Learned from IHI Prototyping<br>▪ Finding Bright Spots at Mount Auburn<br>▪ Celebrating our Extraordinary People<br>▪ Wrap Up | ▪ Upload completed PDSA cycle |
| Coaching Call #2<br>04/30/2018 | | ▪ How's Testing Going? Bright Spots | |
| Six: Holding the Gains<br>05/10/2018 | Pre-recorded lecture | ▪ Introduction<br>▪ Sharing, Spreading, and Scaling<br>▪ Improving Joy Inside IHI<br>▪ Maintaining the Joy Momentum at Mount Auburn<br>▪ Wrap-up<br>▪ Additional Resources | ▪ Continue using PDSA cycles to test changes within improvement project<br>▪ Create simple presentation highlighting work within course<br>▪ Self-evaluation<br>▪ Course evaluation |
| Coaching Call #3<br>05/30/2018 | Webex | ▪ What's Next? | |

## Appendix G: Joy in Work Story Board



## Appendix H: Work Breakdown Schedule



## Appendix I: Project Timeline for Joy in Work

| Date | Project Milestone |
|---|---|
| 01/25/2018 | Joy in Work WebEx with IHI |
| | |
| 02/10/2018 | Book conference rooms |
| 02/15/2018 | Register participants for IHI class |
| 02/19/2018 | Email introduction to Joy in Work to participants |
| 02/20/2018 | Submit bill to senior leader for class |
| 02/25/2018 | Email participants Qualtrics pre-survey |
| | |
| 03/01/2018 | Joy in work: Class with team |
| 03/15/2018 | Joy in work: Class with team |
| 03/29/2018 | Joy in work: Class with team |
| | |
| 04/04/2018 | Coaching call with IHI |
| 04/12/2018 | Joy in work: Class with team |
| 04/26/2018 | Joy in work: Class with team |
| 04/30/2018 | Coaching call with IHI |
| | |
| 05/10/2018 | Joy in work: Class with team |
| 05/22/2018 | Coaching call with IHI |
| | |
| 06/2018 | Consider team meetings for follow up |
| 06/2018 | Track participant QI projects on joy |
| | |
| 07/2018 | Resurvey team with Qualtrics |
| 07/2018 | Analyze data from participants |
| | |
| 08/2018 | Begin to write up final project |

## Appendix J: SWOT Analysis Current State

| STRENGTHS | WEAKNESSES |
|---|---|
| Strong organizational culture of quality | IHI program is new and untested |
| Leadership support for participant development | Union contract negotiations may involve strike |
| New leaders are open to learning and self-development | Challenging clinical issues, can derail priorities |
| **OPPORTUNTIES** | **THREATS** |
| Decrease unit leader intent to leave | Participants could leave organization or be unable to participate |
| Increase unit leader resilience | Cost of program |
| Improve staff engagement | Managing work load of leaders during program |

## Appendix K: Cost of Manger Turnover

| Item | Cost |
|---|---|
| IHI curriculum cost | $8925 for 3-9 participants or<br>$7975 for 10 or more<br>$2325 discounted KP Scholarship c |
| Room costs for team meetings | $0 (internal cost) |
| Use of poly-com | $0 (internal cost) |
| Meeting time-salaries for participants | $11, 220 |
| Cost for facilitator | $2640 |
| Incidental expenses | Photocopies: $10<br>Binders: $50<br>Snacks: $250<br>Drinks: $50 |
| Total projected costs | $23,145 for 10 or more participants |

| Item | Cost to Replace |
|---|---|
| RN Manager | Base Salary: $190,000<br>Projected replacement cost: $142,500-$237,500 |
| RN Assistant Nurse Manager | Base Salary: $180,000<br>Estimated replacement cost: $135,000-$225,000 |
| Recruitment | Advertising: $100,000-$150,000<br>Recruitment services: $20,000<br>Relocation: $10,000 |

## Appendix L: Return of Investment

| | Year 1 | Year 2 | Year 3 |
|---|---|---|---|
| Cost to replace one Unit Level Leader<br>Includes Salary, recruitment, training<br>Assumes 3% increase per year | $237,000 | $244,000 | $251,000 |
| | | | |
| Number of Unit Level Leaders in facility (40) | 40 | 40 | 40 |
| | | | |
| Unit Level Leadership Turnover rate: 48%<br>Number of unit level leader leaving | 19 | 19 | 19 |
| | | | |
| Projected net loss to organization | $4,503,000 | $4,636,000 | $4,769,000 |
| | | | |
| Cost of IHI Program (assumes increase 5%/yr) | $23,145 | $24,302 | $25,750 |
| | | | |
| Total Costs | $4,511,972 | $4,645,420 | $4,778,891 |
| | | | |
| New Turnover rate: 48%-18%=30%<br>Number of unit level leaders leaving | 12 | 12 | 12 |
| | | | |
| Cost to replace Unit Level Leader | $2,844,000 | $2,928,000 | $3,012,000 |
| | | | |
| Salary Cost Savings from Decreased Turnover | $1,659,000 | $1,708,000 | $1,757,000 |
| | | | |
| Return on Investment | 72% | 70% | 68% |

The IHI Joy in Work program does not generate revenue for the organization so benefit cost ratio is 0. The return on investment is equal to the reduction in leadership turnover divided by the cost of the program.

## Appendix M: Communication Plan

| Information Type | Prepared by | Distribution | Frequency | Transmittal |
|---|---|---|---|---|
| Outline of project | Project lead | CNE/COO/CFO | Once | Email |
| Project kick off | Project lead | Leadership team which includes 3 mangers, 4 assistant nurse managers and a supervisor | Once | Offsite meeting-face to face and some printed materials |
| IHI Classroom sessions | Project lead | Leadership team | Weekly | Email, including calendar invites and meetings |
| Team debrief sessions, held after each classroom session | Project lead | Leadership team | Weekly | Email, including calendar invites and meetings |
| Issues | Project lead | Leadership team | As needed if there are concerns, could be one on one or group | Email, including calendar invites and meetings |
| Project updates | Project lead | CNE | Monthly | Face to face, one on ones |
| Updates to DNP chair | Project lead | DNP Chair | Monthly | Zoom sessions |
| Project wrap up and evaluation | Project lead | Leadership team | Once | Final meeting with group |

## Appendix N : Conner-Davidson Reslience Scale

Connor-Davidson Resilience Scale 25 (CD-RISC-25) ©

*For each item, please mark an "x" in the box below that best indicates how much you agree with the following statements as they apply to you over the last **month**. If a particular situation has not occurred recently, answer according to how you think you would have felt.*

| | | not true at all (0) | rarely true (1) | sometimes true (2) | often true (3) | true nearly all the time (4) |
|---|---|---|---|---|---|---|
| 1. | I am able to adapt when changes occur. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 2. | I have at least one close and secure relationship that helps me when I am stressed. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 3. | When there are no clear solutions to my problems, sometimes fate or God can help. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 4. | I can deal with whatever comes my way. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 5. | Past successes give me confidence in dealing with new challenges and difficulties. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 6. | I try to see the humorous side of things when I am faced with problems. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 7. | Having to cope with stress can make me stronger. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 8. | I tend to bounce back after illness, injury, or other hardships. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 9. | Good or bad, I believe that most things happen for a reason. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 10. | I give my best effort no matter what the outcome may be. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 11. | I believe I can achieve my goals, even if there are obstacles. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 12. | Even when things look hopeless, I don't give up. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 13. | During times of stress/crisis, I know where to turn for help. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 14. | Under pressure, I stay focused and think clearly. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 15. | I prefer to take the lead in solving problems rather than letting others make all the decisions. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 16. | I am not easily discouraged by failure. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 17. | I think of myself as a strong person when dealing with life's challenges and difficulties. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 18. | I can make unpopular or difficult decisions that affect other people, if it is necessary. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 19. | I am able to handle unpleasant or painful feelings like sadness, fear, and anger. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 20. | In dealing with life's problems, sometimes you have to act on a hunch without knowing why. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 21. | I have a strong sense of purpose in life. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 22. | I feel in control of my life. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 23. | I like challenges. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 24. | I work to attain my goals no matter what roadblocks I encounter along the way. | ☐ | ☐ | ☐ | ☐ | ☐ |
| 25. | I take pride in my achievements. | ☐ | ☐ | ☐ | ☐ | ☐ |

*Add up your score for each column* 0 + ____ + ____ + ____ + ____

*Add each of the column totals to obtain CD-RISC score* = _____



01-01-17

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# Appendix O: Anticipated Turnover Scale

**TABLE 2**

**ANTICIPATED TURNOVER SCALE (ATS)**

**Purpose:** To be used to assess the staff nurse's perception or opinion of the possibility to voluntarily quit current job.

**Instructions:** For nurses receiving the nurse retention protocol, please have them complete the Anticipated Turnover Scale. This scale should be completed at baseline (before protocol is initiated) and on a 6-month basis.

**Scoring:** Each item is scored from 1= strongly disagree to 7= strongly agree. Steps for scoring of this instrument are as follows:

1. Reverse score items 1, 3, 6, 8, 9 and 10 as follows
   - 7 = Strongly disagree
   - 6 = Moderately disagree
   - 5 = Slightly disagree
   - 4 = Uncertain
   - 3 = Slightly agree
   - 2 = Moderately agree
   - 1 = Strongly agree
2. Sum the response provided by adding up the numbers circled and divided by 12.
3. This provides an individual score on a 1 (strongly disagree) to 7 (strongly agree) scale for each person.

This questionnaire is to be completed by the individual nurse.

Directions: For each item below, circle the appropriate response.

| *Items* | *Strongly Agree* | *Moderately Agree* | *Slightly Agree* | *Uncertain* | *Slightly Disagree* | *Moderately Disagree* | *Strongly Disagree* |
|---|---|---|---|---|---|---|---|
| 1. I plan to stay in my position a while. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 2. I am quite sure I will leave my position in the foreseeable future. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 3. Deciding to stay or leave my position is not a critical issue for me at this point in time. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 4. I know whether or not I will be leaving this agency within a short time. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 5. If I got another job offer tomorrow, I would give it serious consideration. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 6. I have no intentions of leaving my present position. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 7. I have been in my position about as long as I want to. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 8. I am certain I will be staying here a while. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 9. I do not have any specific idea how much longer I will stay. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 10. I plan to hang on to this job for a while. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 11. There are big doubts in my mind as to whether or not I will really stay in this agency. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| 12. I plan to leave this position shortly. | 7 | 6 | 5 | 4 | 3 | 2 | 1 |

*Hinshaw & Atwood ©1984. (Reprinted with permission.)*

8 MARCH 2003

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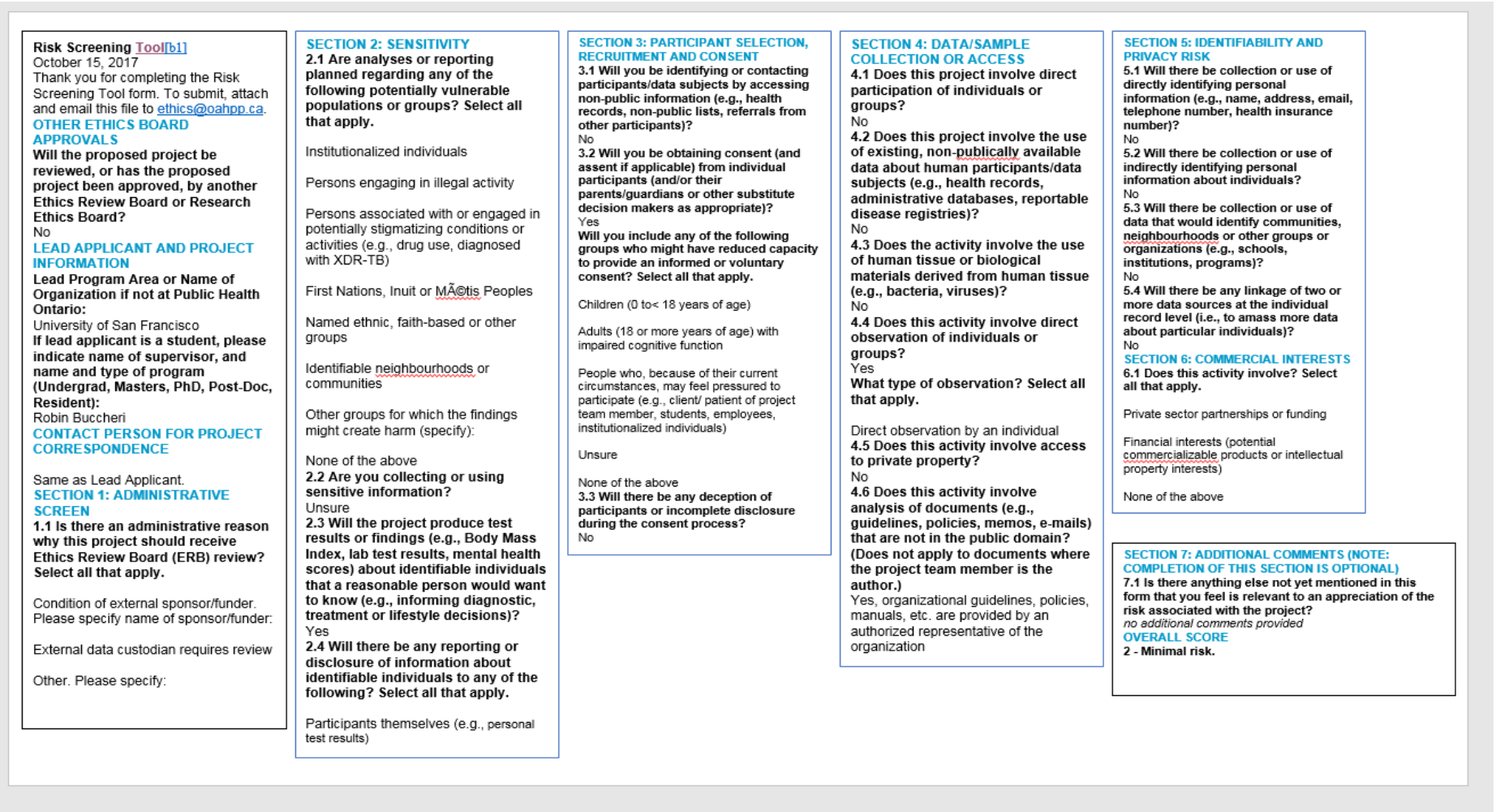
## Appendix P: Risk Assessment



**Risk Screening Tool**[b1]
October 15, 2017
Thank you for completing the Risk Screening Tool form. To submit, attach and email this file to ethics@oahpp.ca.

**OTHER ETHICS BOARD APPROVALS**

**Will the proposed project be reviewed, or has the proposed project been approved, by another Ethics Review Board or Research Ethics Board?**
No

**LEAD APPLICANT AND PROJECT INFORMATION**

**Lead Program Area or Name of Organization if not at Public Health Ontario:**
University of San Francisco
**If lead applicant is a student, please indicate name of supervisor, and name and type of program (Undergrad, Masters, PhD, Post-Doc, Resident):**
Robin Buccheri

**CONTACT PERSON FOR PROJECT CORRESPONDENCE**

Same as Lead Applicant.

**SECTION 1: ADMINISTRATIVE SCREEN**

**1.1 Is there an administrative reason why this project should receive Ethics Review Board (ERB) review? Select all that apply.**

Condition of external sponsor/funder. Please specify name of sponsor/funder:

External data custodian requires review

Other. Please specify:

**SECTION 2: SENSITIVITY**

**2.1 Are analyses or reporting planned regarding any of the following potentially vulnerable populations or groups? Select all that apply.**

Institutionalized individuals

Persons engaging in illegal activity

Persons associated with or engaged in potentially stigmatizing conditions or activities (e.g., drug use, diagnosed with XDR-TB)

First Nations, Inuit or MÃ©tis Peoples

Named ethnic, faith-based or other groups

Identifiable neighbourhoods or communities

Other groups for which the findings might create harm (specify):

None of the above

**2.2 Are you collecting or using sensitive information?**
Unsure

**2.3 Will the project produce test results or findings (e.g., Body Mass Index, lab test results, mental health scores) about identifiable individuals that a reasonable person would want to know (e.g., informing diagnostic, treatment or lifestyle decisions)?**
Yes

**2.4 Will there be any reporting or disclosure of information about identifiable individuals to any of the following? Select all that apply.**

Participants themselves (e.g., personal test results)

**SECTION 3: PARTICIPANT SELECTION, RECRUITMENT AND CONSENT**

**3.1 Will you be identifying or contacting participants/data subjects by accessing non-public information (e.g., health records, non-public lists, referrals from other participants)?**
No

**3.2 Will you be obtaining consent (and assent if applicable) from individual participants (and/or their parents/guardians or other substitute decision makers as appropriate)?**
Yes

**Will you include any of the following groups who might have reduced capacity to provide an informed or voluntary consent? Select all that apply.**

Children (0 to< 18 years of age)

Adults (18 or more years of age) with impaired cognitive function

People who, because of their current circumstances, may feel pressured to participate (e.g., client/ patient of project team member, students, employees, institutionalized individuals)

Unsure

None of the above

**3.3 Will there be any deception of participants or incomplete disclosure during the consent process?**
No

**SECTION 4: DATA/SAMPLE COLLECTION OR ACCESS**

**4.1 Does this project involve direct participation of individuals or groups?**
No

**4.2 Does this project involve the use of existing, non-publically available data about human participants/data subjects (e.g., health records, administrative databases, reportable disease registries)?**
No

**4.3 Does the activity involve the use of human tissue or biological materials derived from human tissue (e.g., bacteria, viruses)?**
No

**4.4 Does this activity involve direct observation of individuals or groups?**
Yes

**What type of observation? Select all that apply.**

Direct observation by an individual

**4.5 Does this activity involve access to private property?**
No

**4.6 Does this activity involve analysis of documents (e.g., guidelines, policies, memos, e-mails) that are not in the public domain? (Does not apply to documents where the project team member is the author.)**
Yes, organizational guidelines, policies, manuals, etc. are provided by an authorized representative of the organization

**SECTION 5: IDENTIFIABILITY AND PRIVACY RISK**

**5.1 Will there be collection or use of directly identifying personal information (e.g., name, address, email, telephone number, health insurance number)?**
No

**5.2 Will there be collection or use of indirectly identifying personal information about individuals?**
No

**5.3 Will there be collection or use of data that would identify communities, neighbourhoods or other groups or organizations (e.g., schools, institutions, programs)?**
No

**5.4 Will there be any linkage of two or more data sources at the individual record level (i.e., to amass more data about particular individuals)?**
No

**SECTION 6: COMMERCIAL INTERESTS**

**6.1 Does this activity involve? Select all that apply.**

Private sector partnerships or funding

Financial interests (potential commercializable products or intellectual property interests)

None of the above

**SECTION 7: ADDITIONAL COMMENTS (NOTE: COMPLETION OF THIS SECTION IS OPTIONAL)**

**7.1 Is there anything else not yet mentioned in this form that you feel is relevant to an appreciation of the risk associated with the project?**
*no additional comments provided*

**OVERALL SCORE**

**2 - Minimal risk.**

Appendix Q: Certificate of Completion

Institute for Healthcare Improvement

This certificate is awarded to

# Allison Reid

for participating in the educational activity entitled

## Finding & Creating Joy in Work, starting March 1 2018

Finding & Creating Joy in Work, starting March 1 2018

on
3/1/2018–5/24/2018

This continuing education activity carries 6.00 Contact Hours.

In support of improving patient care, the Institute for Healthcare Improvement is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

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INTERPROFESSIONAL CONTINUING EDUCATION

Derek Feeley
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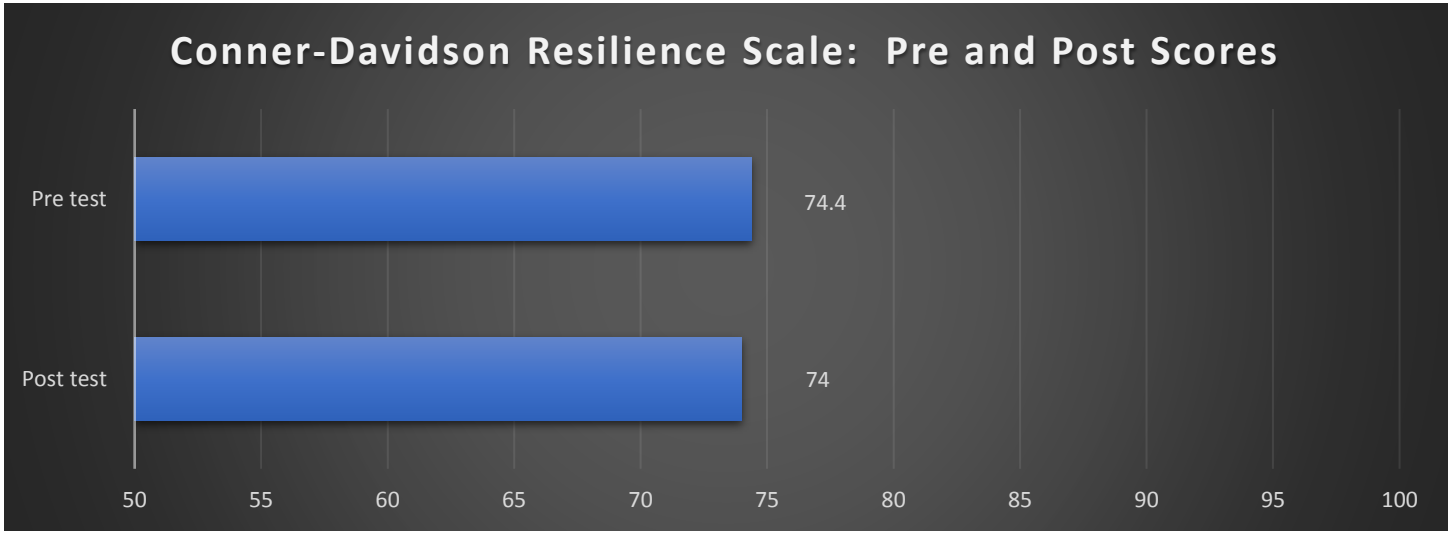
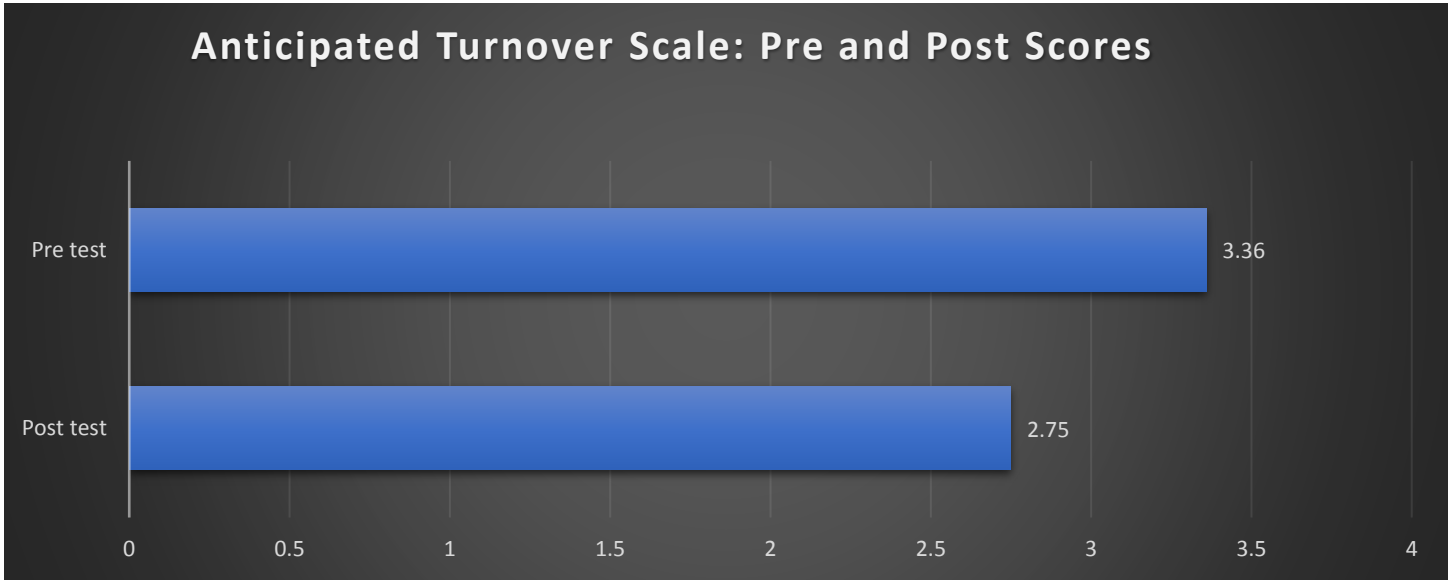
**Appendix R: Results Pre and Post Joy in Work Program**



## Appendix S: IHI Self-Assessment Tool


# Self-Assessment

IHI designed this short self-assessment to help you understand your current state of joy in work. After completing the following questions, identify the areas that need improvement and begin to generate some potential change ideas.

| | Strongly Disagree | Disagree | Neither | Agree | Strongly Agree |
|---|---|---|---|---|---|
| 1. I regularly feel burned out from my work. | ☒ | ☐ | ☐ | ☐ | ☐ |
| 2. Recently, I have become more callous toward people — both in my personal and professional life. | ☒ | ☐ | ☐ | ☐ | ☐ |
| 3. Overally, I believe I work in an excellent organization. | ☐ | ☐ | ☐ | ☒ | ☐ |
| 4. People generally support one another in the unit on which I work. | ☐ | ☐ | ☐ | ☒ | ☐ |
| 5. I feel comfortable bringing up problems and tough issues to my supervisor and leaders. | ☐ | ☐ | ☐ | ☒ | ☐ |
| 6. I feel well-informed about important decisions at my organization. | ☐ | ☐ | ☐ | ☒ | ☐ |
| 7. I am confident that I can participate effectively in efforts to make improvements on my unit/at my organization. | ☐ | ☐ | ☐ | ☒ | ☐ |
| 8. I feel recognized for my contribution at my organization. | ☐ | ☐ | ☐ | ☒ | ☐ |
| 9. My team is given feedback about changes put into place based on event reports. | ☐ | ☐ | ☐ | ☒ | ☐ |
| 10. I feel I have control over my daily workload. | ☐ | ☐ | ☐ | ☒ | ☐ |
| 11. I generally feel tired when I get up in the morning and have to face another day at work. | ☐ | ☒ | ☐ | ☐ | ☐ |
| 12. In my work, I feel like I have a positive influence on people. | ☐ | ☐ | ☐ | ☒ | ☐ |

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## Appendix T: Joy in Work Elevator Speech

Hello! Did you know we are working on a plan to bring Joy into the workplace? Joy!! I want more nurses to feel about their work as Dianne does. A family member found Dianne on Facebook to thank her for the excellent care she gave not only to his father but to him. When I talked to Dianne about this story she told me with such feeling and passion about how she considers the whole family to be her patients. It was obvious how much she genuinely cared about this family. In a health care system where 4 out of 10 nurses consider leaving their job in the first year, this was a refreshing story. Our nurses are getting burned out and this lowers patient satisfaction, increases costs and hurts outcomes.

There is a group of us taking a course from the IHI on Finding and Creating Joy at work. We are going to be working on some projects to get staff engaged and finding joy in their everyday work. We want to test some ideas that will help staff get back to what really matters to them at work. We want nurses to have the same passion that Dianne does. If you are interested in finding out more or participating in creating some meaningful changes, let's set up a time to talk. I am happy to come to you and give you some information.

## Appendix U: IHI Project Charter


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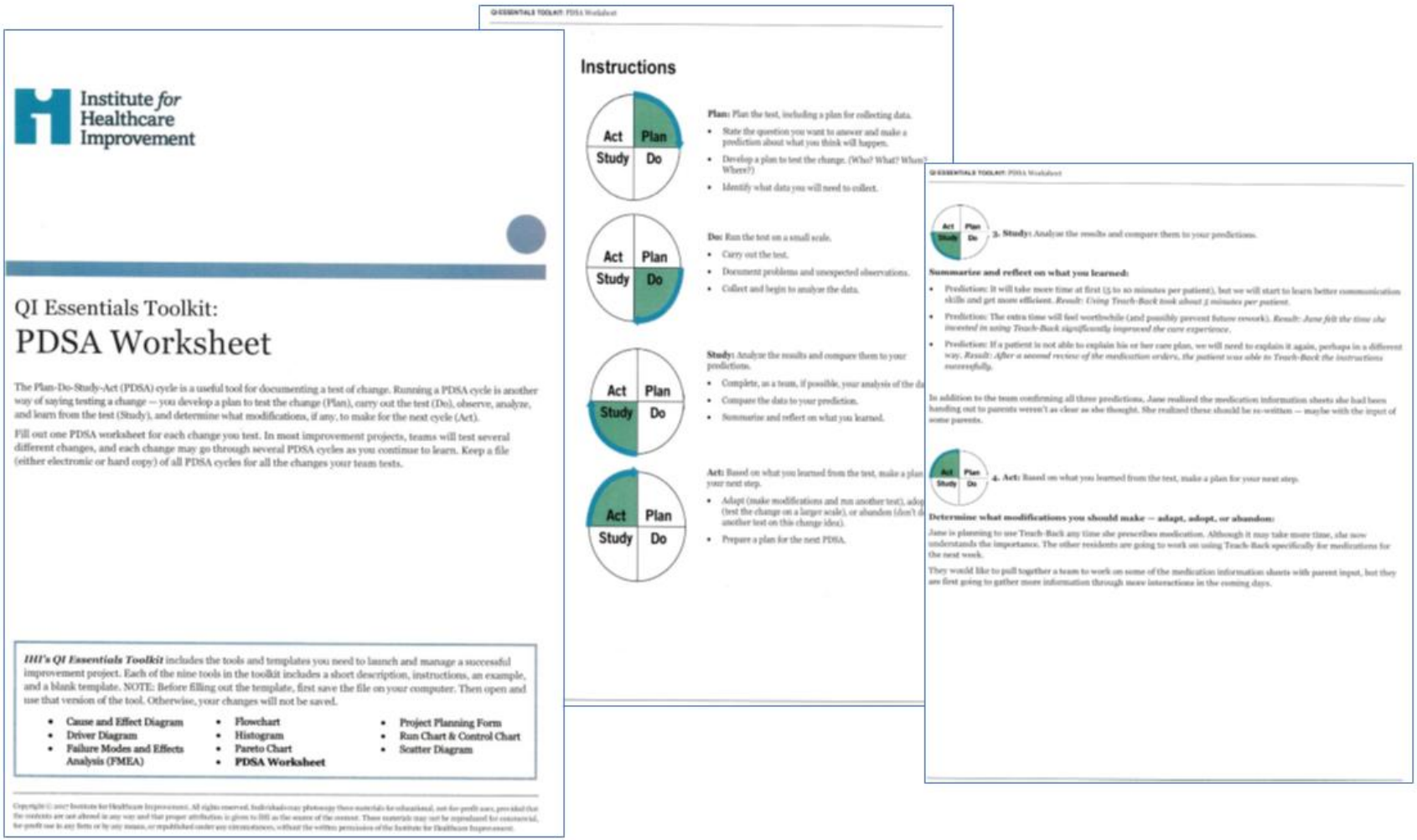
## Appendix V: PDSA Worksheet



Institute for Healthcare Improvement

QI Essentials Toolkit:

PDSA Worksheet

The Plan-Do-Study-Act (PDSA) cycle is a useful tool for documenting a test of change. Running a PDSA cycle is another way of saying testing a change -- you develop a plan to test the change (Plan), carry out the test (Do), observe, analyze, and learn from the test (Study), and determine what modifications, if any, to make for the next cycle (Act).

Fill out one PDSA worksheet for each change you test. In most improvement projects, teams will test several different changes, and each change may go through several PDSA cycles as you continue to learn. Keep a file (either electronic or hard copy) of all PDSA cycles for all the changes your team tests.

***IHI's QI Essentials Toolkit*** includes the tools and templates you need to launch and manage a successful improvement project. Each of the nine tools in the toolkit includes a short description, instructions, an example, and a blank template. NOTE: Before filling out the template, first save the file on your computer. Then open and use that version of the tool. Otherwise, your changes will not be saved.

- Cause and Effect Diagram
- Driver Diagram
- Failure Modes and Effects Analysis (FMEA)
- Flowchart
- Histogram
- Pareto Chart
- **PDSA Worksheet**
- Project Planning Form
- Run Chart & Control Chart
- Scatter Diagram



Instructions

Act / Plan / Study / Do

**Plan:** Plan the test, including a plan for collecting data.

- State the question you want to answer and make a prediction about what you think will happen.
- Develop a plan to test the change. (Who? What? When? Where?)
- Identify what data you will need to collect.

**Do:** Run the test on a small scale.

- Carry out the test.
- Document problems and unexpected observations.
- Collect and begin to analyze the data.

**Study:** Analyze the results and compare them to your predictions.

- Complete, as a team, if possible, your analysis of the da
- Compare the data to your prediction.
- Summarize and reflect on what you learned.

**Act:** Based on what you learned from the test, make a plan your next step.

- Adapt (make modifications and run another test), adop (test the change on a larger scale), or abandon (don't d another test on this change idea).
- Prepare a plan for the next PDSA.

**3. Study:** Analyze the results and compare them to your predictions.

**Summarize and reflect on what you learned:**

- Prediction: It will take more time at first (5 to 10 minutes per patient), but we will start to learn better communication skills and get more efficient. *Result: Using Teach-Back took about 3 minutes per patient.*
- Prediction: The extra time will feel worthwhile (and possibly prevent future rework). *Result: Jane felt the time she invested in using Teach-Back significantly improved the care experience.*
- Prediction: If a patient is not able to explain his or her care plan, we will need to explain it again, perhaps in a different way. *Result: After a second review of the medication orders, the patient was able to Teach-Back the instructions successfully.*

In addition to the team confirming all three predictions, Jane realized the medication information sheets she had been handing out to parents weren't as clear as she thought. She realized these should be re-written -- maybe with the input of some parents.

**4. Act:** Based on what you learned from the test, make a plan for your next step.

**Determine what modifications you should make -- adapt, adopt, or abandon:**

Jane is planning to use Teach-Back any time she prescribes medication. Although it may take more time, she now understands the importance. The other residents are going to work on using Teach-Back specifically for medications for the next week.

They would like to pull together a team to work on some of the medication information sheets with parent input, but they are first going to gather more information through more interactions in the coming days.

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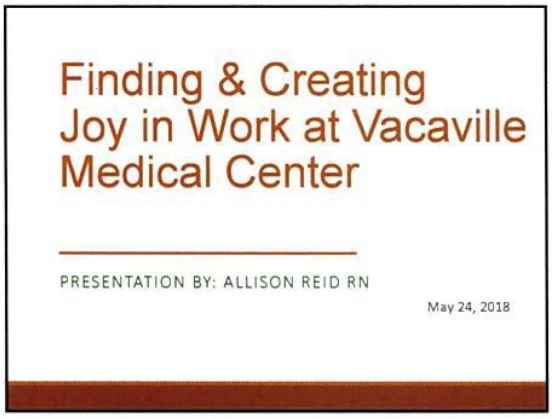
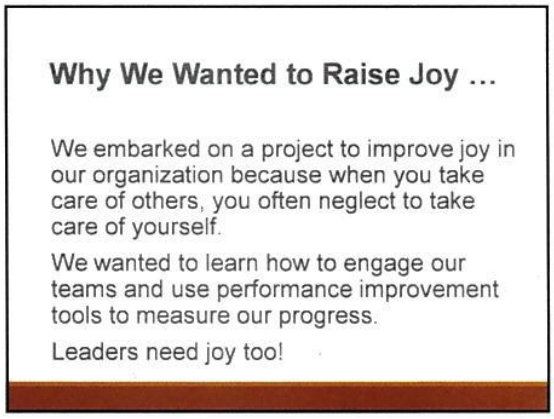
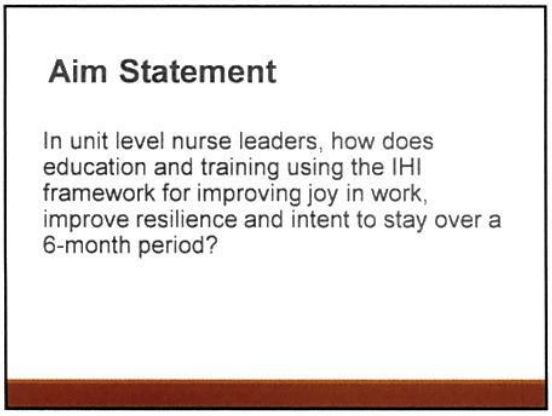
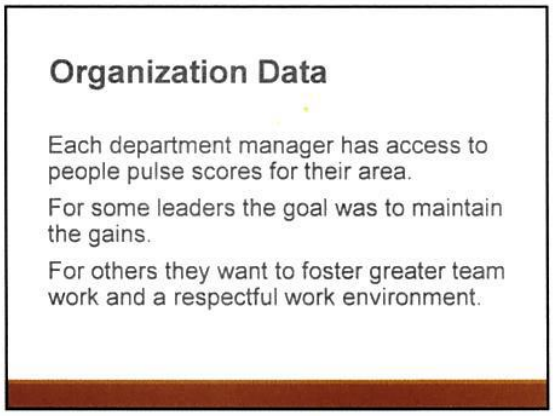
## Appendix W: Nurse's Week Photo

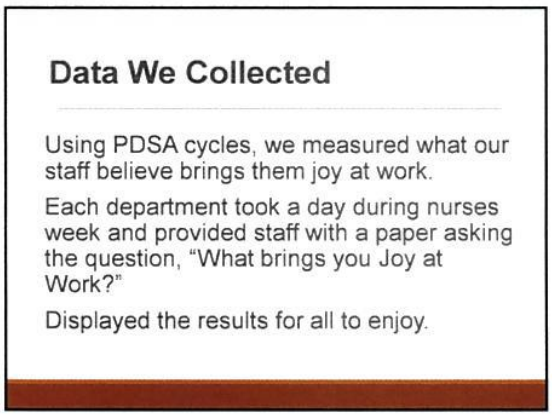
**Appendix X: IHI Power Point (1 of 2)**



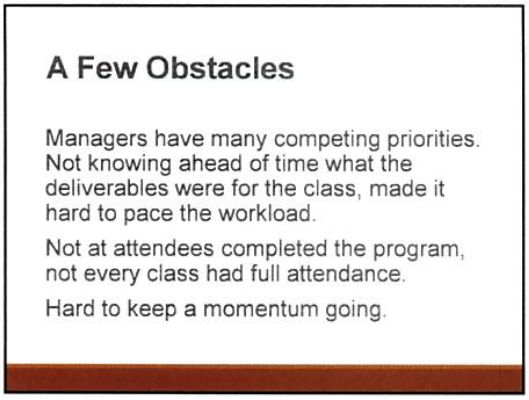



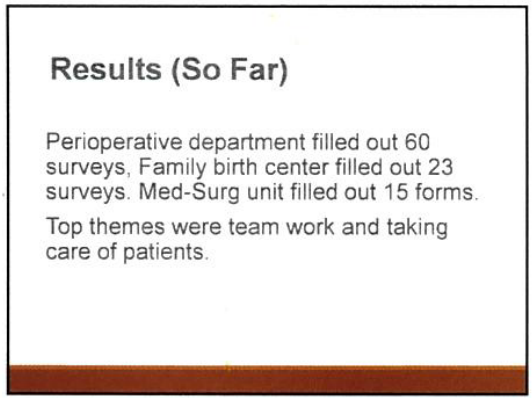



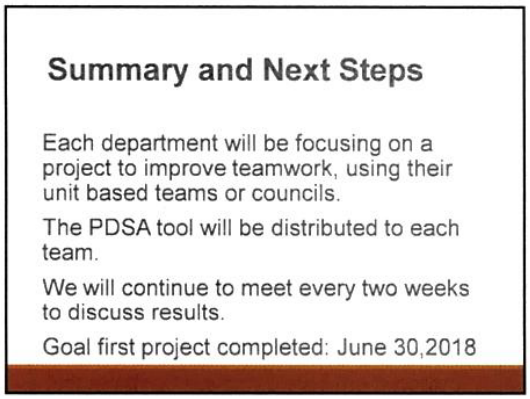




# Appendix X: IHI Power Point (2 of 2)



# Appendix Y: Letter of Support from Organization

KAISER PERMANENTE®

Kaiser Foundation Hospitals
1 Quality Drive, Vacaville, Ca 95688
(707) 624-2088

November 3, 2017

RE: Letter of Support for DNP Project

To Whom It May Concern:

This is a letter of support for Allison Reid to implement her DNP Comprehensive Project. "A performance improvement framework to increase unit manager resilience and intent to stay, " at Kaiser Permanente Vacaville Medical Center.

**Cherie M Stagg**
Chief Nursing Executive (CNE)

11/3/2017
**Date**

# Appendix Z: Connor-Davidson Resilience Scale Permission

Dear Allison:

Thank you for your interest in the Connor-Davidson Resilience Scale (CD-RISC). We are pleased to grant permission to use the CD-RISC in the activity you have described under the following terms of agreement:

1. You agree not to provide the scale to a third party without permission. If other colleagues or off-site collaborators are involved with your project, their use of the scale is restricted to the project described, and the signatory of this agreement is responsible for ensuring that all other parties adhere to the terms of this agreement.

2. You may use the CD-RISC in written form, by telephone, or in secure electronic format whereby the scale is protected from unauthorized distribution or the possibility of modification. **In all use of the CD-RISC, including electronic versions, the full copyright and terms of use statement must appear with the scale. The scale should not appear in any form where it is accessible to the public without permission, and should be removed from electronic and other sites once the project has been completed.**

3. Further information on the CD-RISC can be found at the www.cd-risc.com website. The scale's content may not be modified, although in some circumstances the formatting may be adapted with permission of either Dr. Connor or Dr. Davidson. If you wish to create a non-English language translation or culturally modified version of the CD-RISC, please let us know and we will provide details of the standard procedures.

4. Three forms of the scale exist: the original 25 item version and two shorter versions of 10 and 2 items respectively. When using the CD-RISC 25, CD-RISC 10 or CD-RISC 2, whether in English or other language, please include the full copyright statement and use restrictions as it appears on the scale.

5. A fee of $ 30 US is payable to Jonathan Davidson at 325 Magnolia Drive, Chapel Hill, NC 27517, USA, either by PayPal (www.paypal.com, account mail@cd-risc.com), cheque, bank wire transfer (in US $$), international money order or Western Union. **This fee covers up to thirty (30) uses of the scale.**

6. Complete and return this form via email to mail@cd-risc.com.

7. In any publication or report resulting from use of the CD-RISC, you do not publish or partially reproduce items of the CD-RISC without first securing permission from the authors.

If you agree to the terms of this agreement, please email a signed copy to the above email address. Upon receipt of the signed agreement and of payment, we will email a copy of the scale.

For questions regarding use of the CD-RISC, please contact Jonathan Davidson at mail@cd-risc.com. We wish you well in pursuing your goals.

Sincerely yours,

Jonathan R. T. Davidson, M.D.
Kathryn M. Connor, M.D.

Agreed to by:

Allison Reid — 9-28-2017
Signature (printed) — Date

Director
Title

University of San Francisco
Organization

## Appendix Z1: Statement of Non-Research Determination (1 of 3)

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### DNP Statement of Non-Research Determination Form

**Student Name: Allison Reid**

**Title of Project:** A Performance Improvement Framework to Increase Self-Efficacy, Resilience, and Intent to Remain.

**Brief Background of Project:** A medical center in an integrated health care system in Northern California has experienced high turnover in unit level leaders. The role of unit level leaders in this organization is complex and often stressful. These leaders must simultaneously deliver on organizational goals, patient safety, budgets, and staff satisfaction (Loveridge, 2017). Increasing self-efficacy (Shoji et. al., 2016)) and resilience (Hudgins, 2016) can help these leaders cope with stress and find joy in their work making them less likely to leave (Hudgins, 2016).

**A) Aim Statement:** To implement the Institute of Healthcare Improvement's (IHI) framework for improving joy in work in order to increase unit level leaders' self-efficacy, resilience, and intent to remain over 3-6 months.

**B) Description of Intervention:** The evidence-based intervention will consist of weekly education and coaching in a peer group practice setting. This education will be based on the IHI framework for improving joy in work. How the IHI framework will be implemented is demonstrated in the table below that outlines each component of the framework and associated activities and measurements designed specifically for this project.

| Components | Activity | Measurement |
|---|---|---|
| Real time measurement | Updates visual boards<br>Creates leadership standard work | Leaders will keep leadership visual boards updated daily, weekly and monthly as appropriate. |
| Wellness and resilience | Mindfulness exercises<br>Reflective practice<br>What matter to me exercise? | Weekly leadership huddles with guided mindfulness, appreciation and reflective practice within 1 month. |

## Appendix Z1: Statement of Non-Research Determination (2 of 3)

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| | | |
|---|---|---|
| Daily improvement | Daily staff huddles | 100% of all teams will have daily operations huddles within 3 months. |
| Camaraderie and teamwork | Formation of peer support group | Leadership group will have an offsite in first month and will continue to meet monthly for peer support. |
| Participative management | Leadership team co-creates leader visual boards that will be implemented in each office | Each leader will have their own visual board to track department goals and what is important to them within 3 months. |

**C) How will this intervention change practice?** This evidenced-based intervention will change practice by increasing self-efficacy, resilience, and reducing turnover among unit level leaders. Leadership turnover at the manager level is as high as 8.3% and the cost of replacing them as much as 75% to 125% of their salary (Loveridge, 2017).

Self-efficacy is defined as having confidence in oneself to perform a task or behavior (Bandura, 1994). Higher self-efficacy is associated with the efficient regulation of the stress-adaptation process as well as better mental and physical health (Korpershoek et. al. 2011).

Hatler and Sturgeon (2013) defined resilience as the ability to bounce back from adversity, to adapt to adverse conditions while maintaining a sense of purpose.

According to Hudgins (2015) there is a relationship between resilience and job retention. The higher the leaders' resilience, the more likely they are to stay in their position.

**D) Outcome measurements:**

1. Self-efficacy will be measured pre-and post-intervention using the General Self Efficacy Scale (Chen, Gully, Eden, 2001).

2. Resilience will be measured pre-and post-intervention using the 10 item

# Appendix Z1: Statement of Non-Research Determination (3 of 3)

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| |
|---|
| Connor-Davidson Resilience Scale (Connor, Davidson, 2003).<br><br>3. Intent to remain within the department and organization will be measured pre-and post-intervention using the Anticipated Turnover Scale (Hinshaw et. al., 1987) |
| |

To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used: (http://answers.hhs.gov/ohrp/categories/1569)

☐X This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). Student may proceed with implementation.

☐ This project involves research with human subjects and must be submitted for IRB approval before project activity can commence.

Comments:

**EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST ***

**Instructions: Answer YES or NO to each of the following statements:**

| **Project Title:** | **YES** | **NO** |
|---|---|---|
| The aim of the project is to improve the process or delivery of care with established/ accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes. | **X** | |
| The specific aim is to improve performance on a specific service or program and **is a part of usual care**. ALL participants will receive standard of care. | **X** | |
| The project is **NOT** designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison | **X** | |